PHILADELPHIA MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 14, 1885.

ORIGINAL LECTURES.

ON CASES OF SKIN-DISEASE.

Delivered at the New York Hospital

BY L. DUNCAN BULKLEY, M.D.

DIFFUSED PAPULAR SYPHILIDE.

GENTLEMEN,—This is a case of diffuse lenticular papular syphilide, which is now fading away. Last week each one of these papules was encircled by a roseolous spot. Nothing remains now but staining. On making pressure on these spots you will perceive that they are due to pigmentation. If they were vascular, the spots would disappear on pressure; these, as you see, do not. The eruption is confined chiefly to the flexor surfaces and to the trunk. The skin-disease made its appearance after the patient had a chancre; but it would not be likely to be mistaken for any other disease. If it were eczema there would be more inflammatory action, and the disease would exist in patches. Psoriasis would not exist to such an extent on the flexor surfaces without also involving the extensors. I wished to show you the pigmentary syphilide, and also the diffused macules around each papule.

SYPHILIS PALMARIS.

I showed you this case of palmar syphilis with eczema at my last lecture. I then called your attention to the chief diagnostic points in connection with the disease,—viz., that the eruption was mainly made up of papules arranged in double rings, with a wavy outline and well-defined margin. He has been under the mixed treatment of bichloride of mercury and iodide of potassium, and locally the glycerole of the subacetate of lead and glycerin, each twenty grammes in one hundred and twenty-eight grammes of water.

GENERAL SYPHILIS, WITH PALMAR LESION.

In speaking of the case of palmar syphilis just shown, I told you two weeks ago that the early syphilides when appearing on the hands generally affected both sides symmetrically. This case I now show you is only of early syphilis: it is about two years since the chancre was first noticed. You will notice that the eruption is made up of separate isolated papules, but which have a tendency to exist in groups of a circular outline. They are erythematous and hard, but there is no thickening, and not much scaling. A papular syphilide also exists on the knees and legs. We sometimes see an erythema resembling this eruption somewhat, but the arrangement is not similar. In ninety-nine out of every hundred cases of skin-disease of the palm we may suspect syphilis. The patient is at present under the mixed treatment.

PSORIASIS PALMARIS.

Two weeks ago I showed you an eruption existing on the hand, in which it was somewhat difficult to make a diagnosis between eczema and syphilis. To-day I show you this case of general psoriasis together with palmar psoriasis, which I said when speaking of syphilis of the palm, at the last lecture, was a rare lesion. The patient is 37 years of age, and he has had psoriasis nine years. It is generally diffused over the body; the flexor surfaces are, however, spared even where there is a great amount of the disease in the neighborhood. On the back and arms the eruption is guttate and nummular; in the latter situation it is also confluent. The skin of the penis and the glans penis are also affected. On examining the hands we find separate scattered spots, with no tendency to run together, spreading peripherally, and healing in the centre; no fissures are to be found, and on removing the scales from a papule, a reddened bleeding surface is exposed. The head, neck, and face are also covered with a similar eruption. The tongue does not present any scales, even with so large an amount of eruption elsewhere. I do not believe in the existence of a psoriasis linguæ, and consider the white patches which are sometimes seen on the tongue nothing more than a degeneration of the epithelium, being some form of commencing epithelioma.

PSORIASIS DIFFUSA.

D. K., a German, 55 years of age, has had the present eruption over ten years, which commenced on the head, affecting the knees, back, and lately the elbows. He is the father of four children, three of whom are healthy, the other has hip-disease. The patient had a chancre when he was young, but it was not followed by an eruption. He also had acute rheuma-

tism, but with these exceptions has always enjoyed good health. When the patient presented himself to me he showed me an eruption existing to a slight extent on the elbows, and to one not familiar with the disease it would be difficult to make a diagnosis from so small an amount of disease. On examining him carefully I found small, scattered scaly spots existing on the extensor surfaces of both arms. They were of a pearly-white color, and when removed the limiting membrane was shown, and beneath the reddened and bleeding corium. On the back is seen a more or less circular eruption, existing in scattered spots. The thighs are also affected, but to a limited extent. On examining the scalp an eruption is found, but, on account of the frequent washing, nothing characteristic can be seen.

This case shows the necessity of examining carefully all parts of the body before making a diagnosis, because if you do not you will often make mistakes as to the nature of the disease.

EPIDERMIC FAVUS.

The next case is one of epidermic favus. The patient is 10 years old, and gives no history of contagion. The eruption consists, as you see, of a patch of diseased skin, nearly circular, and about two inches in diameter, situated over the left malar bone and extending down on the cheek. It is circular like ringworm, and yellow masses are seen which, when removed, leave cup-like depressions. At first glance one not accustomed to see skin-diseases would not suppose it was favus, but would think it was either ringworm or erythematous eczema. In tinea circinata there would not be these cup-like masses and yellowish, sulphur-like color, nor the peculiar odor, and if it were a case of eczema there would be a history of moisture. The commonest mode of contagion is from cats: the cats get it from mice; and it is transmitted to human beings by the cats, although it occurs less frequently in cats than in mice.

FAVUS OF THE SCALP.

In this girl there is the same eruption, occupying a vast surface, with cups around the hair, with a peculiar odor. These distinct masses are not inflammatory, but are simply dry sulphur-like crusts which readily crumble into a fine powder, in which the spores of the *Achorion Schönleinii* are found. It is very contagious. The cups are the diagnostic mark; but, if we do not find these cups, upon examining the crusts we shall find the parasite (Achorion Schönleinii). The patient is 12 years of age, and has had the disease since she was cutting her eye-teeth, or when she was about five years of age. It commenced in a small spot about the size of a quarter of a dollar. There is no traceable history of contagion. Where we remove the crusts a red surface is exposed, which remains so for some time. The surface is red and shining, it does not exude, and the disease has eaten down to the rete Malpighii, which is laid bare; it does more than that, it eats down wherever it finds dermal tissue. The patches are generally oval in shape, mostly of a greenish color; the hair is thin. It destroys the hair more than tinea. There are spots where the hair will not grow; that is, where we see the head red and shining. If we arrest the spread of the disease now, there will be sufficient hair left to grow and cover the whole of the head. There will be some bald spots, but not enough to show. As the disease spreads, it passes down the hair-follicle and root-sheaths, destroying the hair-follicle. I show you some of the Sydenham Society's plates which are marked herpes tonsurans, but are really favus. I show you a model showing the disease as it appears on the upper lips: the scales have been removed, and nothing remains but the cups.

We have here two cases which present the forms in which favus may appear. With regard to the prognosis in the boy, it is by far the best, as all we have to do is to pick out the crusts and rub in a little diluted citrine ointment: it will be well in a week. I have picked out one of the crusts from the boy's cheek: it is the prettiest demonstration I have ever made or seen,—the yellow solid mass circular, with its upper part cupped and depressed. The child with the favus capitis may be a year in being cured. If in a hospital, it might be cured in a month. It is difficult to be exact as to the time of effecting a cure, as individual cases vary much. The treatment is local, and consists in epilation, as the fungus reaches down to the bottom of the hair-follicle and it has to be removed. The hair should be cut short before commencing treatment, and after epilating a five-grain solution of the bichloride of mercury should be rubbed into the diseased patches with your own hands.

ACUTE PUSTULAR ECZEMA.

This case of acute pustular eczema over the face and scalp I have shown you several times before. The skin is dry and harsh; there is congestion and thickening of the skin of the face, also thickening and scaling of the scalp. I show you the case that you may see the good effects of treatment, and also the rebellious nature of the disease. The child is still using linseed oil and oil of cade. As there is not much itching, and as constant stimulation may increase the thickening, we will omit the oil of cade and continue the alkaline baths, and afterwards anoint with linseed oil. At first she took acetate of potassium, with spiritus Mindereri to stimulate the activity of the skin, and also cod-liver oil. She is now taking a tonic containing arsenic, iron, etc.; but I think that she will do better under an alkaline treatment.

ERYTHEMATOUS ECZEMA.

As we learn a great deal from seeing diseases in the various stages of treatment, I show you this girl with erythematous eczema of the head and forehead. When we first saw her, you will remember, the eruption was moist; now it is dry. I do not allow patients with eczema to wash as often as they desire, but tell them when to do so. She has been taking: ℞ Sol. Fowleri, f℥ij; Mist. rhei et sodæ, f℥iv; a teaspoonful three times a day after meals. Locally: ℞ Ol. cadini, ℥i, Ungt. zinci oxid., Ungt. simplicis, āā f℥ss.—M. Two weeks ago she was using ungt. zinci oxidi et plumbi.

I do not know whether you have all felt and appreciated the swelling of the glands in the neck. They were at one time enlarged to a great extent, as a result of inflammation. Some would think that it was due to syphilis; but it is not.

ECZEMA RUBRUM OF THE LEG TREATED WITH RUBBER BANDAGE.

This colored man has had the eruption which you see on his leg since February, 1879. It made its appearance at the junction of the middle and lower thirds of the leg, as the result of a burn, which he painted with iodine. This, causing irritation, gave rise to an eczema, which spread until it now occupies the entire left leg, extending up on to the thigh, and being limited below as if it were marked out by the band of his slipper. On the right leg there are marks of eczematous sores. He says that these latter were never ulcers, and that it is not more than a month since they healed up. He gives no history of any previous eruption.

I had him keep the bandage on the leg that you might see its operation in eczema. It produces a great deal of sweating in ulcers; in eczema it causes a dryness and scaling, much of the function of the sweat-glands being arrested. The beauty of the rubber bandage is that it does not denude the surface, and that it possesses the advantage over the ordinary bandage of permitting the patient to walk and stand on it, yielding with the leg and foot. The leg has now ceased to exude; but if you allow the bandage to remain off for a length of time it will exude again. I have seen the diseased surface cease to exude altogether and have healthy tissue underneath. The bandage should be taken off at night, washed, and hung up, and the leg also washed.

ECZEMA CAUSED BY FLANNEL.

I show you this case merely for diagnostic purposes. You here see the results of scratching, the irritation being undoubtedly due to the use of red flannel. Some may say that it is not an eczema, but a dermatitis; but, from its extreme itchiness, thickening, and chronicity, I would call it an eczema.

ORIGINAL COMMUNICATIONS.

MYALGIA.

BY JAMES C. WILSON, M.D.,

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A VERY large proportion—much larger than is commonly supposed—of cases in which pain is the principal symptom are due to myalgia. This affection may be defined as a morbid condition of voluntary muscles, of which the chief and often the only symptom is pain on movement. Myalgia, as a general term, has few synonymes: it is sometimes called myodynia. This affection has no essential relation to rheumatism or the rheumatic diathesis. Therefore the common use of the term "muscular rheumatism" as a synonyme for myalgia is an error. This error has occasioned much confusion of thought and mistaken medication, and tends to main-

tain the obscurity which overhangs the subject of the so-called (and often miscalled) rheumatic affections in general. That true rheumatic processes may extend from serous or fibrous structures to contiguous muscular masses has (in the absence of demonstration) been assumed by many writers of authority; but that acute or subacute rheumatism, with its recognized characters, ever manifests itself primarily or exclusively as an inflammation of muscle-substance is an assumption wholly without clinical or pathological support. The term myo-rheumatism is as inapplicable as muscular rheumatism, and lacks the sanction of usage. Myositis is a term used to describe (1) an acute inflammation of muscle often traumatic and commonly attended by suppuration; and (2) a chronic, indurating, inflammatory process, not infrequently due to syphilis. Neither of these conditions resembles the affection under consideration in its clinical aspects, nor is allied to it pathologically.

As manifested in particular muscles or groups of muscles, myalgia has long been described under the terms cephalodynia, torticollis (*m. cervicalis*), pleurodynia (*m. pectoralis vel intercostalis*), lumbago (*m. lumbalis*), dorsodynia, omodynia, scapulodynia (*m. dorsalis*), etc.

This affection must, in the present state of our knowledge, be classified with the diseases of nutrition in the more narrow sense. It is not a diathetic disease.

To Dr. Inman, of Liverpool, is due the credit of first having pointed out the frequency of this malady and the ease with which it is mistaken for other and much more serious diseases,—an error in diagnosis which has been followed by grave results, especially in the case of nervous and self-centred females and other hypochondriacal persons. It cannot, however, be denied that this author, carried away by his enthusiasm, exaggerated the importance of this local affection at the expense of undervaluing the frequency and significance of other painful disorders which have their origin in the nervous system.

To Dr. Inman we also owe the term myalgia, which has the positive merit of embodying the idea of pain as the chief symptom of the disorder and the muscles as its seat, and the not inferior negative merit of implying no erroneous theory as to its nature and cause.

This affection is described in few, even among the most recent, text-books. In others it receives merely incidental mention. In the majority of them it is passed over in silence. Yet it is obvious that the descriptions of muscular rheumatism—which are rarely omitted—are based upon and refer to cases of various kinds which for the most part are not rheumatic at all, and very frequently are examples of myalgia.

Myalgia is essentially "pain produced in a muscle which is obliged to work when its structure is imperfectly nourished or impaired by disease." Hence all influences which unfavorably affect the nutrition of the muscles, all diseases which directly affect the integrity of their structure, predispose them to this affection. The defect in nutrition may be only relative to the amount of work the muscle is called upon to do, or there may be absolute mal-nutrition implicating the whole body. The muscle may be impaired by local diseases which affect it alone, or it may share in morbid processes which also involve other and distant structures.

Sedentary occupations, leading, as they do, to poor nutrition of the muscular system from want of proper use and exercise, mal-nutrition from a diet deficient in amount and defective in kind, or in childhood from too rapid growth, the chronic wasting diseases, the state of convalescence from acute maladies, and, finally, degenerative diseases of the muscles themselves, all favor the development of myalgia. Among the acute diseases which by their derangement of nutritive processes especially render those who have suffered from them liable to this painful affection of the muscles during convalescence, is acute articular rheumatism. It is this fact, taken together with the use of a misnomer, that has given rise to the view that the muscles share with the serous and fibrous structures in the lesions of that disease, and that myalgia is "rheumatism" of the muscles.

There is, however, over and above these defects in nutrition an especial predisposition or idiosyncrasy, the nature of which is unknown, which renders certain individuals far more liable to suffer myalgic pain than others. This predisposition is encountered in those who have an inherited or acquired gouty taint, and in those who are free from gout, with perhaps equal

frequency. It is not associated with a special liability to true rheumatism.

The most common exciting cause is overwork pure and simple, especially overwork which brings into excessive and prolonged exercise unaccustomed muscles. Next in frequency is exposure to cold, and especially to damp cold, when overheated or over-fatigued. Finally, inevitable and incessant contractions, such as are physiological and are performed without consciousness or sensation in a healthy state of the muscles, will, in muscles that are defectively nourished or have undergone fatty, granular, or fibroid degeneration, cause more or less distinct myalgia. As examples of myalgia due to the first of this group of causes, I may cite the pain in the adductors of the thighs after a hard ride when out of practice, the epigastric pain in children suffering from measles or other acute affections attended with persistent cough, and the pain of spasm, in particular that which follows tonic spasm, such as occurs from reflex causes in the calves of the legs at night and in bathers. Many of the pains of childhood which are classed in common parlance together under the head of "growing pains" are myalgic in their nature. Examples of the second form may be instanced in the pains of wry-neck or lumbago, such as often occur in those who, being very tired but otherwise healthy, fall asleep in a draught of air, or in those who, coming home at evening in cold weather, find a leaking pipe in the cellar, and, stooping over it to stop it, or in some other emergency of every-day life, bring into excessive use unaccustomed muscles in an atmosphere that is at once cold and damp. Examples of the third group are common enough in the flying or fixed muscular pain and soreness that occur in wasting chronic diseases and in the convalescence of acute maladies where prolonged muscular effort is too early undertaken. Certain forms of præcordial pain met with in degenerative lesions of the muscular substance of the heart are without doubt myalgic in character, and will, when the clinical data of such conditions come to be more fully understood, be recognized as having more or less diagnostic value.

The chief symptom, the one symptom that is common to all cases, is pain. It is sometimes, especially in the acute cases, constant; more frequently it is slight or wholly absent when the patient is at rest, with the affected muscles in full extension. But it is invariably present or aggravated when the muscles are called into action. It is experienced throughout the muscular mass, but is most intense at or near the points of tendinous insertion. Its character is usually stabbing or stitch-like; sometimes it is acutely dragging or tearing, at other times it is like the soreness of a contused or inflamed part. It is—in acute cases frequently, in chronic cases almost invariably — accompanied by a sensation of stiffness in the affected muscles. The pain is essentially the same in all cases, variations in its character and severity being due to differences in the opportunity for physiological rest in different groups of muscles. The most obstinate and severe form of myalgia is that which occurs in the intercostal muscles and their fibrous aponeuroses,—pleurodynia. Here the affected muscles are constantly concerned in the respiratory movements, and have no time for physiological rest except in the intervals of these movements. Scarcely less stubborn and severe are the myalgias of the great muscles of which the principal function is to maintain by their nicely-balanced and ever-varying contractions the erect position of the head and trunk. Less painful and of shorter duration are the myalgias of the limbs: less painful, because prolonged intervals of absolute rest may be voluntarily secured; of shorter duration, because it is by rest that the balance of nutrition is most speedily restored.

Some degree of tenderness usually exists over the whole extent of the myalgic area. It is often, however, slight, except in the region of tendinous insertion, to which it is in many cases wholly restricted. It is not associated with cutaneous hyperæsthesia. Spasm does not, as a rule, occur in the acute cases except when the muscles are brought into use. In chronic cases, however, a condition of tonic spasm, a spastic rigidity, with more or less persistent painfulness, comes on, and in very chronic cases such tissue-changes take place as result in great impairment or absolute loss of contractile power, with or without atrophy.

Objective signs are absent, except that it is evident that the patient assumes by preference an attitude of repose, and that

it keeps the involved structures as much as possible at rest. Pyrexia does not occur. The appetite and digestion are not impaired. Acid sweats are not present. The urine shows no constant or characteristic alteration. There is no tendency to endocardial or pericardial inflammation. If constitutional disturbance be present, it is trifling and due to prolonged local suffering and want of sleep. In by far the greater number of instances the patient remains in his usual health except the local malady.

Myalgia may affect the voluntary, and perhaps also the involuntary, muscles of any part of the body. Those most frequently involved are those subjected to continuous and excessive work and at the same time liable to exposure to cold and damp. The most common and important varieties have already been mentioned.

The aching, dragging pain in the back of the neck, so frequent in poorly-nourished nervous women and in other cases of neurasthenia, the so-called pain of nervous exhaustion, is myalgic. It is felt chiefly during fatigue, is present in the erect posture, and is almost always relieved when the patient lies down. It is referred sometimes to the base of the skull, sometimes to the whole of the back of the neck, but most commonly to the spinal region just above the level of the upper borders of the scapulæ, and constitutes a harassing symptom of the cases in which it occurs. In this connection we must not overlook the fact that many of the pains of that obscure condition to which the term spinal irritation has been applied are myalgic.

The duration of acute myalgia is usually brief, lasting from a few hours to several days; that of the chronic form is indefinite, tending to last years,—sometimes, under unfavorable circumstances, even a lifetime,—with varying periods of exacerbation and remission, which are, after the disease is fully established, much influenced by the phases of the weather.

The essential pathology of myalgia is obscure. The more closely we study our cases, the more obvious becomes the fact that it differs in all important clinical and pathological characters from rheumatism, and that, when these two conditions are associated, the relationship is accidental and not causal. Still less does it resemble neuralgia. It is not an inflammation, as that term is generally understood; but there is ground for the opinion that the lesions are of the nature of a *sub-inflammatory* process within the muscle-substance. The not uncommon instances in which an injury or contusion has been followed shortly after recovery by severe myalgia are of some value as illustrating this theory.

The indications for treatment are threefold: (*a*) relief of pain, (*b*) physiological rest for the affected muscle, (*c*) restoration of the balance between the nutrition of the muscle and the work it has to do.

(*a*) Relief of pain is often secured by rest in a position that permits the complete relaxation of the muscles involved. In acute cases, due to overwork pure and simple, and where complete rest is attainable, little other treatment is required. In the course of a few hours or days the function of the muscles is fully restored and their contractions are performed without pain. When, however, complete muscular relaxation is impracticable or fails to afford relief, anodynes are necessary. Morphia hypodermically is very useful, but this altogether independently of any local action. The continuous application of dry or moist heat by means of hot-water bags, flannels, poultices, spongio-piline, etc., is also useful. Anodyne lotions do good, and liniments containing aconite, belladonna, chloroform, or chloral may be especially recommended, as may also the compound belladonna liniment of the British Pharmacopœia. Plasters of belladonna, conia, and menthol also relieve pain. Galvanism occasionally gives prompt relief. The same statement may be made of static electricity. The pain sometimes disappears under gentle and long-continued massage.

(*b*) Rest is usually enforced, in some degree at least, by the intensity of the pain which attends movement. In severe cases rest in bed becomes a necessity. In affections of the respiratory muscles, as pleurodynia, firm support of the side by means of overlapping strips of plaster drawn from the spine downward and forward in the direction of the ribs to the median line in front is sometimes necessary and always comfortable.

(*c*) The balance of nutrition is restored by rest. Local means to further this end are such as relieve pain,—namely, heat,

anodyne and stimulating frictions, massage, and galvanism. The parts must be protected from sudden changes in temperature by extra thicknesses of flannel or sheets of wool or cotton batting, covered, if necessary, with a piece of oiled silk or fine gum cloth. In old cases, prolonged massage, with passive movements, and the slowly-interrupted galvanic current alternating with rapid faradic currents, are followed by good results.

As constitutional measures, a Dover's powder at night, followed by mild purgation in the morning, is often indicated. Purgation is especially called for in plethoric or gouty persons, in whom also Turkish or vapor baths are of good service; while poorly-nourished, anæmic subjects demand quinine, iron, lime, and cod-liver oil. If the attack linger, full doses of ammonium chloride, and, in old cases, of potassium iodide in moderate doses, well diluted and long continued, are advocated; and in stubborn cases Anstie recommended deep acupuncture of the muscle near its tendinous attachment. In cases marked by a tendency to spastic rigidity, the repeated hypodermic injection of atropine may often be relied upon as the speediest means of cure. Where the general nutrition is poor, the local trouble is apt to be obstinate, and often yields only to measures that restore the general health.

A CASE OF CHOLECYSTOTOMY.*

BY W. W. KEEN, M.D.†

ALBERT HENRY K., German, æt. 45, residing in Philadelphia, was admitted into the hospital September 21, 1885, during the service of Dr. W. W. Keen. Parents healthy. He is the only living one of twelve children; the rest died during infancy.

General health was good, with occasional attacks of gastro-intestinal catarrh. Four years ago he had a severe attack of colic, the pain arising in the right hypochondriac region and extending to the umbilicus. The attack lasted several hours, and was relieved by medicine. The following year he had a similar seizure, followed by a chill, loss of appetite, vomiting, and constipation, and in a short time the conjunctiva was jaundiced.

He had another attack June 12, 1884, followed by nausea, vomiting, chill, loss of appetite, constipation, high-colored urine and clay-colored stools, with marked jaundice of his whole body, which has continued ever since. Since that time the attacks have become more frequent, occurring once or even twice weekly.

Since January 1, 1885, he had been under medical care, but with no improvement. He first came to the dispensary August 6, and was under observation and treatment, but without any change for the better.

Upon admission, it was noted that he had lost some flesh; his mind was dull; the skin, conjunctiva, and mucous membranes were intensely jaundiced; marks of scratching appeared on the abdomen, and he suffered much from itching and stinging at night; the pulse was 54 and full; tongue slightly coated with yellow fur in the morning. His appetite was poor, the bowels costive, and the stools were of a clay color. He also complained of flatulence and constant tenderness and distress in the epigastrium. The urine was high-colored, acid, sp. gr. 1025; no albumen was detected, and no sugar; bile-pigment was present.

Physical examination showed a tumor below the margin of the ribs in the right hypochondriac region; it extended from the right nipple-line three and a half inches towards the median line, and to within two and a quarter inches of the umbilicus. It was not absolutely flat upon percussion, but tender and elastic. The liver-dulness extended from the sixth interspace in the nipple-line to one-fourth inch below margin of ribs. The abdomen was not distended; spleen of normal size; lungs and heart both normal.

September 24. Had severe headache; pain in the epigastrium, followed by a rigor lasting three hours, then fever. 5 P.M. Temp. 101.5°; pulse 80; podophyllin (gr. ½ at night) acted freely on the bowels.

September 28. Dr. Keen introduced into the tumor a hypodermic needle, and thought that he detected a stone. A very small quantity of liquid was withdrawn: it was dark-colored, and mostly blood.

October 1. An aspirator-needle was introduced into the tumor three inches, and a probe passed through it. A stone was detected.

October 4. He had a chill, which lasted three hours, followed by the usual symptoms. The operation which was appointed for the next day was, therefore, postponed.

October 10. Dr. Keen, assisted by Drs. Grove, Mears, O'Hara, Willitts, Elmer, Learned, Boyd, and others, operated, with the usual antiseptic precautions, including the spray, carbolic acid being used.

The surface of the body was first washed off with carbolized water, and etherization was commenced at 1.30 P.M. An incision of three inches was made parallel with the margin of

* Read before the Philadelphia Academy of Surgery, November 2, 1885.

† For the careful notes of this case I am indebted to Dr. Elmer, Surgical Resident of St. Mary's Hospital.

the ribs, commencing one and a half inches below the ensiform cartilage, and extending over the prominence of the tumor. All the vessels were tied with catgut ligatures. The abdominal walls were thick. All hemorrhage had ceased before the peritoneum was opened. Now the liver came into view, and what was thought to be the tumor—the distended gall-bladder—proved to be an enlarged left lobe of the liver, presenting much more to the right than usual. The gall-bladder could neither be seen nor felt.

In order to obtain more room, the incision was prolonged about two inches to the right. The colon and omentum were now exposed. Still the gall-bladder could not be detected with certainty; but a hard mass could be obscurely felt, which was believed to be gall-stones. It lay transversely, directly in front and slightly to the right of the spine, and almost absolutely in contact with it. To obtain still more room to work at such a depth, another incision was made, beginning at the inner end of the first incision, and extending downward in the linea alba three inches. The closest search was made for the gall-bladder, but there was still much doubt as to its situation.

From the posterior part of the transverse fissure, almost in contact with the spine, an apparently uniform mass, continuous with the gastro-hepatic omentum, extended downward and forward, in the posterior part of which, as stated, the gall-stones could be somewhat obscurely felt near the liver; and, farther away from it, a softer mass, which ought to be the flaccid gall-bladder. These lay in such relation to each other that the gall-stones were thought to be in the cystic and the common duct.

Into this softer mass—the supposed gall-bladder—a small opening was made; but it was soon evident that this was the duodenum, as the finger detected the pylorus. Discovering this, the wound in the duodenum was closed with five interrupted and five Lembert's sutures, all of carbolized silk. The harder mass containing the gall-stones was now carefully lifted by the finger and thumb, and the wall and tissues in front of it cautiously incised for about three-fourths of an inch, and two stones, respectively three-fourths and one and one-fourth inches in size, removed. The gall-bladder was as firmly contracted around them as a kid glove clasps the finger, and contained absolutely no fluid. The opening of the cystic duct could be felt by the finger, and was patulous. No other stones could be felt. A probe, it was thought, could be passed from the cystic to the common duct.

The wound in the gall-bladder was stitched with four interrupted and four Lembert's carbolized-silk sutures. All hemorrhage had apparently ceased. The cavity was carefully cleansed, and the abdominal walls, including the peritoneum, were sutured with wire, and the wound dressed with bichloride-of-mercury gauze. The operation lasted until 4.45 P.M. His pulse during the operation was never more than 75 nor under 60, and his skin was fairly warm; but his respiration, from early in the operation, was sighing.

After the operation, he suffered from moderate shock. Hot bottles were applied along his extremities.

5 P.M. Temperature 99.5°; pulse 88. He suffered very much pain, and complained of thirst. Morphine, gr. $\frac{1}{8}$, and cracked ice.

5.30 P.M. Hiccough; relieved by atropia, gr. $\frac{1}{120}$.

7 P.M. Pulse 96, and compressible; temp. 99$\frac{1}{5}$°. Morphine, gr. $\frac{1}{4}$. Small quantities of brandy-and-water were given at intervals.

9 P.M. Feeling quieter. Still complains of pain.

11 P.M. Pulse 104; respiration 24. Morphine, gr. $\frac{1}{4}$, was given at intervals. Through the night he gradually failed.

October 11. At 7 A.M., pulse very feeble and rapid; temp. 101$\frac{2}{5}$°. Digitalis and brandy were given; but he did not rally, and died at 8 A.M.

The post-mortem examination was made at 12 M. Rigor mortis well marked, though the trunk was still warm. All the abdominal contents were deeply jaundiced. About six to eight ounces of blood were found in the belly, and, as the greater part of it was behind the peritoneum and extended to and around the right kidney, it presumably came from vessels injured in the lifting of the mass in which the gall-stones were situated. This had been carefully done, as it was impossible to obtain access to it otherwise at such depth, but it required some force. No hemorrhage had been observed during or immediately after the operation. There had been no bleeding from the operation-wounds, either in the shrunken gall-bladder, the walls of which were very thin, or from those in the duodenum or the abdominal walls. There was no hemorrhagic tendency noticed, as is so often the case in such operations. There also had been no escape of bile or intestinal contents into the peritoneal cavity. No organs were observed except those concerned in the operation.

The liver, gall-bladder, stomach, duodenum, pancreas, and colon were removed in mass, and the specimens showed the following facts:

The left lobe of the liver, especially its anterior portion, was much enlarged and considerably twisted to the right, so that its semilunar projection occupied the position of the gall-bladder, and was easily mistaken for it before the operation. The liver was deeply fissured between the right as well as the left lobe and the lobus quadratus. No gall-bladder existed in the proper site for it, but it was found lying transversely in a shrunken

condition, as stated, far posteriorly. The common and cystic ducts were patulous, and a probe was passed freely into the gall-bladder from the duodenal end. The wounds in the gall-bladder and the duodenum were effectively closed by the sutures, and no escape of the contents had taken place. No other gall-stones were found. The mucous membrane of the duodenum was deeply congested for a wide extent, undoubtedly from inflammation existing before the operation. The duct of the pancreas was pervious.

So far as I am aware, such complications as this displacement of the gall-bladder, its shrunken condition, and the impossibility of deciding what was and what was not gall-bladder, have not before been reported. It may be said that the incision should have been first made at the place where the stones were felt; but it was decided not to do so, on account of the obscurity with which they could be felt lying under considerable tissue, which might, in the displaced position of the gall-bladder, be a part of the intestines or contain large vessels, and at the depth at which they were situated it would have been exceedingly difficult, if not impossible, to control the hemorrhage or repair the damage to the intestinal wall, should it have proved to be the intestine. Indeed, I seriously debated even abandoning any attempt to remove the stones at one time, on account of the difficulty of reaching them; and, on reviewing the case, I am inclined to believe that it would have been better to close up the abdominal wound, and trust to the possibility of the stones ulcerating into the duodenum, to which the gall-bladder was already closely matted.

The fatal issue in the man's debilitated condition was due to the shock of a prolonged operation and the moderate after-hemorrhage.

One other point demands notice. It is very evident that the hypodermic needle-point did not touch the stones, and it is somewhat doubtful to me whether the probe passed through the aspirator-needle did, judging from the depth at which they were found. But the sensation of scratching such a stone was so deceptive that all three of the resident physicians, as well as myself, were clearly under the impression that the probe certainly did do so, and we were fairly certain that the hypodermic needle also did.

A CASE OF ACQUIRED SYPHILIS WITH SECONDARY LESIONS, THE RESULT OF TATTOOING.

BY SPENCER TROTTER, M.D.

CASES of syphilis not acquired in the ordinary way, through sexual intercourse, are so rare comparatively that the following one may prove of interest not only in its medical but also in its legal and moral aspects:

In September, 1884, Arthur K., æt. 18, a native of Missouri, was admitted into the lower surgical ward of the Pennsylvania Hospital,—service of Dr. Thomas G. Morton,—suffering with a suppurating wound in the fold of the left elbow, which had been done with a knife in January of the same year, had healed up, and then broken down again.

On examination, there were found scattered over the body patches of pustulo-squamous syphiloderm; the genital organs were found to be exceedingly small,—undeveloped, in fact,—and from his statement he rarely had an erection, and then very imperfectly, and never had had a nocturnal emission. There was neither history nor sign that there had ever existed any primary lesion on the genitals. His arms and forearms were tattooed with well-executed designs. He gave the following history.

In 1876 he was first tattooed, and since then off and on until March, 1884, when the last two pieces were executed on the left forearm. Previous to this the tattooing, which was done by different individuals, had never given rise to any sores or symptoms other than the slight irritation from the materials employed. One of these last two pieces was the figure of an elephant, which was done by a man who *wet the needle-holder in his mouth* to outline the design, and then worked in the vermilion and India-ink. This was followed in several weeks (he did not remember the exact time intervening) by a distinct, suppurating ulcer, which lasted for some time. Two months after this (in May, 1884) the cicatrix in the fold of the elbow broke down into an ulcer. In June (1884), three months after the primary lesion, a patch of pustulo-squamous syphiloderm appeared on the back, and since then others have developed on other parts of the body.

The patient does not remember having the roseolar and papular eruptions of the early secondary stage, but "copper-colored" maculæ were observed on the trunk, and the half-arches and velum palati showed the condition characteristic of secondary syphilis. An axillary and an epitrochlear bubo were found on the left side, and by a careful inspection with a lens a distinct scar, the cicatrix of the chancre, was found in the saddle of the ele-

phant figure. The patient was placed on the protiodide of mercury in combination with an iron salt, but left the hospital in a short time of his own accord, very slightly improved.

This case is one of peculiar interest, inasmuch as we are able to draw a positive conclusion as to the source and point of infection of syphilitic poison by excluding the almost undeveloped genitals as a factor in the acquisition of the disease.

Undoubtedly a "mucous patch" or some other form of syphilitic lesion existed in the mouth of the person who tattooed our patient last, who *wet the needle-holder to outline the design by putting it in his mouth*, for his tattooing was the only one followed by a distinct "sore," which was without doubt a chancre, as it was followed by secondary lesions.

PHILADELPHIA, October 16, 1885.

NOTES ON THE NEW ANTISEPTICS, HYDRONAPHTHOL AND THE POTASSIO-MERCURIC IODIDE.*

BY R. J. LEVIS, M.D.,

Surgeon to the Pennsylvania Hospital and to the Jefferson College Hospital.

THE following are the claims made for the newly-discovered antiseptic, hydronaphthol:

It is at least twelve times as effective as carbolic acid, and is entitled as a true antiseptic to occupy a position in the comparative tables next to the mercuric bichloride.

It is thirty times as potent as salicylic acid, sixty times as effectual as boric acid, and has six hundred times the antiseptic power of alcohol.

Hydronaphthol is soluble when placed in cold water to the extent of one part in two thousand. It is soluble in hot water in the proportion of one to one hundred; but when the water becomes cooled to ordinary temperatures a precipitate occurs, leaving a solution of one to one thousand. In this strength of one to one thousand it permanently prevents the development of the germs of putrefaction in all putrescible fluids.

Whilst the true antiseptic or *inhibitory* action of hydronaphthol in such cold aqueous saturated solution is perfect, its germicidal and proper disinfectant power is ineffective. For the destruction of already existing germs, such as have a tenacious vitality, as those of anthrax bacilli and pathogenic micrococci, it therefore cannot be relied on. As to its action in this regard, as compared with carbolic acid, it should be remembered that a ten-per-centum carbolic solution is required,—a strength practically improper in wound-treatment. In ordinary antiseptic practice, carbolic acid is valuable only on account of its inhibitory action.

The first use of hydronaphthol as an antiseptic was by Dr. G. R. Fowler, of Brooklyn, to whom the profession is indebted for its introduction to practical surgery. My own experience with the antiseptic action of hydronaphthol in the wards of the Pennsylvania Hospital and in private surgical practice confirms his observations, as given in his recent articles in the *New York Medical Journal*.

Hydronaphthol is a grayish substance, in the form of crystalline laminæ having a slightly aromatic taste and odor. It is soluble freely in alcohol, ether, chloroform, glycerin, benzole, and the fixed oils.

In the aqueous saturated solution of one to a thousand it is absolutely unirritating, and has no toxic action, either local or systemic, is free from unpleasant odor, and has no injurious action on metallic instruments or on clothing-fabrics.

Besides its use in aqueous solution, I have used it in the form of a powder diluted, preferably with the oxide of zinc in the proportion of one to fifty.

I believe that hydronaphthol may well displace carbolic acid from practical surgery.

The potassio-mercuric iodide is four or five times as powerful as a true germicide or disinfectant as the mercuric bichloride. For such use it is effective in aqueous solutions in the proportion of only one to twelve thousand.

The potassio-mercuric iodide is made by simply dissolving equal quantities of the biniodide of mercury and the iodide of potassium in distilled water. The solution is evaporated, and there remain yellow, needle-like crystals of the potassio-mercuric iodide.

In the use of such dilutions of this powerful antiseptic, local irritation is entirely avoided, and the risk of producing the

* Read before the Philadelphia Academy of Surgery, November 2, 1885.

constitutional effects of mercury is greatly diminished.

The introduction into surgical treatment of these two remarkable and powerful substances, hydronaphthol and the potassio-mercuric iodide, will do much to overcome some of the objections and inconveniences of antiseptic practice.

TWO CASES OF LIGATURE OF THE DORSALIS PEDIS ARTERY FOR HEMORRHAGE.

BY CHARLES A. SEWALL, M.D.,
Acting Assistant-Surgeon, United States Army, Post-Surgeon, Fort Selden, New Mexico.

THE following cases occurred at Fort Stanton, New Mexico: *Case I.*—Manuel Truxillo, Mexican. I found the patient bleeding profusely from a wound over the instep, caused by having cut himself with an axe ten days previously. After removing the wrappings, which were saturated with blood, I attempted to tie the bleeding vessels in the wound by enlarging the incision, but the hemorrhage was so alarming it was thought best to ligature the dorsalis pedis artery. This vessel was readily exposed and tied just below the annular ligament. The ligature came away on the seventh day, and on the twelfth after the operation the wound had entirely healed. No anæsthetic was administered.

The second case occurred in a soldier. Private W., Sixth Cavalry, while cutting wood for the garrison ten miles from the post, cut his foot severely with an axe over the instep. Although the soldiers, his comrades, used various methods to stop the bleeding, when brought to me at the hospital the man had fainted, had a rattle in his throat, and indeed was almost moribund. Hypodermics of ether and brandy were given every half-hour until about twelve had been taken, and a large enema of brandy and beef-tea was introduced into the rectum, as extreme nausea forbade the administration of stimulants per os. An Esmarch's bandage controlled the hemorrhage temporarily.

The following day Assistant-Surgeon Marcus E. Taylor, United States Army, who had been absent from the post at the time of the injury, returned, and tied the dorsalis pedis artery under an anæsthetic. An attempt was made to tie the bleeding vessels in the wound, as in the first case, but without success. A drainage-tube was introduced, and healing proceeded in the usual felicitous manner common to all wounds at Fort Stanton, owing, doubtless, to the high altitude (six thousand one hundred and fifty-one feet) and pure dry air. Antiseptic precautions were taken in both operations and in the subsequent dressing of the wounds. These two cases occurred within two weeks of each other, and from this coincidence my attention has been drawn particularly to wounds of this region,—the dorsum of the foot. From an investigation into the anatomical relations of this class of injuries, we find that they are surgically important for two reasons,—first, the prominent position of the part renders it particularly liable to injury from chopping-instruments; and secondly, owing to its vascularity, a cut—at any point—could lay open almost a net-work of vessels.

When we remember that the dorsalis pedis artery feeds no less than four fair-sized arterial trunks,—viz., the tarsal, metatarsal, dorsalis, and hallucis,—and communicating, besides inosculating by the last-named vessel with the external plantar, to form the plantar arch, and that these vessels have branches ramifying in various directions, particularly the metatarsal, with its digital branches, we cannot but admit that hemorrhage in this locality is a serious accident, and that it will be the best course to pursue in the majority of instances to "make assurance doubly sure" by tying the main source of local arterial supply, as the only hope for its complete suppression.

A CASE OF OBLIQUE HERNIA OF THE OVARY.

BY CHARLES BAUM, M.D.

MRS. P., æt. 36, married, is of English descent. Although nervous and spare, never robust, she has not suffered from disease, except dysmenorrhœa of moderate severity. She has had one abortion, and is the mother of three large, healthy children, the last labor having occurred two years ago: it was marked by partial placenta prævia. Since this labor she has complained at times of dragging pains in the pelvis, but was not prevented from performing her household duties. Nausea and a tendency to syncope accompanied these pains, which were always more severe at what would have been the menstrual

periods. The babe was weaned when thirteen months old. Menstruation recurred ten months after the labor, and each epoch thereafter was marked by nausea, vertigo, uterine tenesmus, and a sensation as if the uterus were being dragged from the pelvis by violence. For about three weeks a swelling had gradually been enlarging in the left groin, until a limping gait was assumed for relief of the dragging pain in the pelvis. When I examined the parts, twenty months after the labor, an evenly-smooth, olive-shaped swelling, about one and one-half inch in length by one inch in width, occupied the left inguinal canal. None of the signs of inflammation were present. Pressure on the mass provoked nausea, while traction caused an increase of the dragging pain, which was referred to the uterus. The ovary was reduced in a few minutes by taxis, unaided by anæsthesia. A truss was directed to be worn, but this advice the patient neglected.

One month later, just before her menstrual period, the ovary again was found occupying the inguinal canal, and while in this situation menstruation occurred, causing great swelling, tenderness, and pain, with some redness in the left groin, accompanied by frequent emesis, prostration, and tearing pains, referred to the uterus. When the period had been completed, spontaneous reduction of the ovary occurred.

630 North Broad Street, Philadelphia.

NOTES OF HOSPITAL PRACTICE.

CHICAGO MEDICAL COLLEGE HOSPITAL.

SERVICE OF WALTER HAY, M.D., LL.D.,

Professor of Nervous and Mental Diseases, and of Medical Jurisprudence.

Stenographically reported by William Whitford, M.D.

CEREBRAL CONGESTION—PETIT MAL.

GENTLEMEN,—Our first patient presents all the appearances of health. She says that her mother was strong and robust, having had nine children, all in good health; her father, too, was hearty, powerful, and robust. As far as can be ascertained, her ancestry was very healthy. This is important, because it justifies us in excluding any hereditary taint or proclivity. It also excludes the existence of the neurotic diathesis as a predisposing cause of disease. The next things to be considered are the patient's age and history. She is 16 years of age. She is well developed, and has all the appearances of good health. Two months ago, we are informed, she menstruated for the first time, and about three weeks ago she menstruated again scantily. While it is evident that the girl's nutritive processes are active and vigorous, at the same time the uterine functions seem to have been dormant. The evidence goes to show that, coincident with the first effort at the manifestation of its functional energy by the uterus (which manifestation was difficult and feeble, not from organic disease or obstruction in the ordinary sense of the word, not from any uterine disease, but simply because of inefficient, gradual, tardy assumption of its physiological functions), our patient was suddenly seized, while at work, with giddiness, followed, not immediately, but speedily, by loss of muscular power and of consciousness,—in fact, there was a suspension of all the nervous functions,—during which condition she remained, we are told, *perfectly still*, with a flushed face. After about twenty minutes, as near as can be learned, she recovered consciousness. This attack was followed by another somewhat similar just about the time of the next menstrual period, or shortly after it, and this one by another.

We have here the evidence of increased intravascular pressure, which was not relieved by the customary discharge from the uterus, and we have also probably an explanation of the insensibility. After a superficial analysis of the case, the diagnosis "epilepsy" is plausible. Let me call your attention to the differential diagnosis of epilepsy. Epilepsy has for its essential phenomenon spasm, indicating increased irritability in the medulla and pons, expressing itself in reflex spasms, the first spasmodic phenomenon expending itself upon the cerebral blood-vessels. This is the first morbid phenomenon in an attack of epilepsy, the vaso-motor spasm being indicated by extreme pallor of the face, dilatation of the pupils, and insensibility. The spasm in epilepsy may not involve the spinal centres or manifest itself in the muscular apparatus. In this case we may have no general convulsion, but simply epilepsy in the form of what is known as "petit mal." In addition to this unconsciousness, we may have spasms of the muscles of the neck, compression of the cerebral veins by the spasmodic action of

the muscles, obstruction to the return of venous blood from the sinuses of the brain to the heart, and, as a consequence, speedily supervening epileptic coma, upon the occurrence of which the spasm ceases. Now, inasmuch as respiration is entirely arrested in an attack of epilepsy, the convulsions cannot continue longer than a minute and a half, because death would ensue. In this case, however, we have a narrative of insensibility extending to twenty minutes, her parents having fixed that time on three different occasions. Had they said an hour, I should have regarded it with some degree of doubt as being merely a guess, but they fixed the time at twenty minutes. They probably carefully observed the time of the insensibility during the attack. *True* epilepsy could not exist for such a length of time. In this case there were no convulsions of the muscles, no vaso-motor spasm, because we are told that her face was "bright red," but there was unconsciousness due to increased intracranial pressure or congestion of the brain. There should have been a congestion of the uterus at that time, and that congestion should have been relieved by the menstrual process. Our patient, as is the rule with women in a healthy condition, makes more blood than is necessary for nutrition, and the excess of that blood should be eliminated every four weeks by the uterus; but in this case the excess was not discharged. Moreover, her attention was being occupied by a certain amount of brain-work: hence the brain was in a state of physiological activity, and the blood was attracted towards it, consequently there was congestion of the brain instead of congestion of the uterus. For this reason, and acting upon this theory, I prescribe the following: Fluid ext. ergot, 25 grammes; water, 25 grammes. M. Sig.—Take teaspoonful at bedtime.

There is no drug which will so promptly and efficiently contract the blood-vessels in the nerve-centres as ergot. It can very rapidly induce cerebral anæmia. The indication in this case is to keep guard over the cerebral circulation. The case is not epileptic just now, but might be developed into such a state very readily. The frequent recurrence of increased vascular pressure within the brain might induce permanent dilatation of the vessels in the medulla and pons, and the dilatation might establish, by reason of its increased vascularity, a condition of increased irritability in the convulsive centres, which, constituting a predisposing cause, might establish the condition known as hystero-epilepsy, related to the menstrual function, and, coincident with it, the menstrual function appearing and interposing as an exciting cause.

In an epileptic paroxysm, with contraction of the blood-vessels and pallor of the face, the application of nitrite of amyl to the nostrils will result in a flushing of the face. The drug will overcome the vascular spasm in the brain, increase the intra-vascular pressure, and arrest the paroxysm instantly. But nitrite of amyl applied to a case like this, with vascular pressure in the brain already increased, as indicated by the red, flushed face, unusual congestion or possibly a hemorrhage within the brain would be readily induced. The vascular pressure would be increased still further by reason of the exhaustion of the vaso-motor energy, and it might be sufficient to precipitate hemorrhage, or it might be sufficient to overcome the vaso-motor resistance altogether without rupture, and thus occasion a fatal arterial congestion of the brain.

A point of practical importance in connection with the treatment of this case is the color of the face. If you have a patient with a pallid face, presenting a condition of syncope without convulsions, never throw water on her, because it is simply a barbarism; but let her lie down, and the unconsciousness of syncope will give place to the consciousness of restored circulation in the brain. Place your patient in a horizontal position, lift the feet, and the face will flush instantly. If the patient has a flushed face, such as this girl presented, apply cold cloths or ice to the elevated head, to induce by their reflex effect contraction of the blood-vessels and relief of the pressure within the brain. It is very probable that this patient will continue to have these attacks of cerebral congestion until the menstrual function is properly established.

PETIT MAL.

I will call your attention to the marked contrast between the predisposition in this case and the other. Our other case was a girl with a flushed face, apparently robust and healthy, and without any hereditary taint; but here we have a patient 32 years of

age, whose mother was insane, in all probability, for eleven years. On the father's side, we are informed that there was an uncle subject to similar attacks. This presents to us the neurotic diathesis by inheritance. She also has unconscious periods. The "spells," as she terms them, first developed when our patient was but two years of age, about which time she had an attack of measles. Now, there are some points of interest connected with these attacks to be distinguished from typical cases of epilepsy. You recognize the epileptic character of the disease, but it is not a typical case of epilepsy. It is a case of the non-convulsive form. We have no history of falling, struggling, or frothing at the mouth, but there is a peculiar expression about the eyes: they look wild and glassy. She does not fall very often during these attacks, but, as she expresses it, "works with her hands." Now, that may be spasmodic or automatic. It is not uncommon for the convulsive paroxysms in epilepsy to be substituted by a type of mental perversion, delirium, or epileptic mania. This is an instance, in all probability, of what I described to you as petit mal,—the non-convulsive form of epilepsy,—the seizure marked by premonitory symptoms, by the "aura epileptica," as it is termed. This is a perversion of sensory innervation, apparently peripheral in its origin, and pursuing a centric or centripetal course, usually beginning in the stomach and creeping up gradually to the head, following which is insensibility. This is characteristic of the true epileptic seizure, although this is not a typical case, as it is the non-convulsive form. The contrast between the two cases is very marked.

The prognosis in this case is bad. The woman in all probability has inherited a diseased brain—structurally and organically diseased—from both sides of the house. "Like produces like," always and everywhere.

A fruitful source of epilepsy is chronic alcoholism in parents. It is probable that the father died from some cerebral disease. She tells us that the doctors said there was a "rush of blood through her father's head after a surgical operation, and that his face was red for some hours after death," indicating increased vascular pressure. Here we have another source of the neurotic diathesis, the predisposing agencies and influences to establish it in this woman. It is clearly established, not only by the history as related, but by her present appearance and expression of countenance. This has become habitual, and alone would induce me to suspect the existence of epilepsy, even if there were no history of the case.

If we can keep the paroxysms under control we may accomplish some good to the woman, but I scarcely look for a complete recovery or any material benefit in this case. After the disease has existed for a period of thirty years, organic changes have probably taken place in the brain which are irremediable. For this case we prescribe the following:

℞ Potassii iodidi, 5 grammes;
Potassii bromidi, 25 "
Ammonii bromidi, 15 "
Ammonii carbonatis, 3 "
Infus. gentianæ, 200 " M.

Sig. Teaspoonful before each meal and at bedtime.

TRANSLATIONS.

PROSTATIC ENLARGEMENT.—Dr. Guyon advises the adoption of the following rules by those suffering with prostatic trouble:

1. Avoid all causes of chill, general or local.

2. Absolutely forbid excess in eating and drinking; seek to prevent abuse rather than to proscribe the use of injurious food and drinks. It is not only excesses in stimulating or alcoholic drinks that the prostatic subject should avoid, but even excesses in drinks the most inoffensive in themselves. It is for this reason that advice to adopt the hydro-mineral treatment should be given only with great circumspection.

3. Avoid voluntary and prolonged retention of urine in the bladder: in resisting the desire to urinate, these patients expose themselves to serious accidents,—retention, cystitis, etc.

4. Sexual indulgence should be moderate, observing the precept *Non morari in coitu*.

5. Keep in mind the evil influences which are exerted at night by the horizontal decubitus and the prolonged immobility. At night avoid a long rest in bed.

A walk of fifteen minutes up and down the room may be taken before retiring, and on rising, with great benefit. In the daytime, in order to prevent contracting sedentary habits, activity is recommended, avoiding fatigue in walking or riding. Constipation is best treated without drastics: a large lavement, warm or cold, taken on rising in the morning, exercises an action at once evacuating and derivative. Often an emollient enema is useful at night, which is to be retained.

6. The skin should be carefully guarded and kept in good condition by dry frictions, massage, and warm baths.

Dr. Tuffier (*Thèse de Paris*, 1885) has shown that in patients with hypertrophy of the prostate the bladder and kidneys are chronically congested, and are thus on the verge of inflammation.

The treatment of prostatic enlargement varies with the period of the malady. In the first period a vigorous hygienic treatment only is needed; catheterism should be forbidden. The second period calls for the catheter to accomplish the evacuation of the bladder. This will have to be repeated in accordance with the degree of the retention. Sudden retention requires antiphlogistic treatment before catheterizing. In difficult cases hypogastric puncture (aspiration of the bladder) may be practised. The next day the catheter may again be used with facility. If it remains difficult, a sound may be retained. The evacuation should be gradual and antiseptic.

Strictures of the urethra may be the site of congestions which bring about a transitory difficulty of micturition or complete retention. In this case the obstacle is found at the level of the stricture. This is a grave complication, and may require aspiration of the bladder, where other treatment has failed.

The *rôle* of congestion in the diseases of the urinary passages in women is also very important. The vascular connection of the uterus and bladder predisposes the latter to all the congestions occurring normally in the uterus. Vesical affections are aggravated at each menstruation and during pregnancy. Certain uterine affections lead to a chronic congestion of that organ, and, consecutively, to congestion of the bladder. The resulting urinary troubles, in such cases, disappear after the treatment of the disorder of the uterus alone.—*Revue de Thérapeut. Méd.-Chir.*

Intramuscular Injections of Metallic Mercury in Syphilis.—At the Grenoble Congress, Dr. Luton, of Rheims, read a communication, of which the following is a *résumé*:

1. The muscular tissue offers a way, preferable to the cellular tissue, for the absorption of metallic mercury.

2. This absorption is proved (*a*) by the therapeutic effects, (*b*) by the production, possible but not constant, of mercurial stomatitis, and (*c*) by experiment on animals.

3. Sulphur, given in an electuary, in a dose, at the least, of five grammes daily, constitutes a remedy for mercurial sore mouth far superior to chlorate of potassium.

4. The amount of metallic mercury, at the beginning, should be one gramme at most, taking into consideration, in repeating the injections, its value in bichloride (1 gr. to 1.354 gr.).

5. The advantages of this method are efficacy, the protection of the digestive tract, and the readiness of giving the remedy at regulated intervals.

6. The intramuscular injections of metallic mercury are at present recommended only for grave and chronic cases of syphilis at the period of transition and in the tertiary stage.—*La France Méd.*

Cocaine and Resorcine in Whooping-Cough.—Professor Moncorvo has advocated, in several published communications, the use of resorcine in whooping-cough as a local parasiticide and antiseptic application to the laryngeal mucous membrane. He further advises the preliminary employment of cocaine solution (ten per cent.). Not having any specific action upon the germs (?) of the disease, cocaine by itself is not curative, but as an adjuvant it has great value in reducing or removing the excitability of the pharynx, and in facilitating the topical applications of the germicide agent.—*Bull. Gén. de Thérapeutique*, September 30.

Topical Application for Neuralgia.—

Chloral hyd.,	0.50	gr.
Menthol,	0.50	"
Cacao butter,	1.	"
Spermaceti,	2.	" M.

Make into a cone-shaped mass.

PHILADELPHIA
MEDICAL TIMES.

PHILADELPHIA, NOVEMBER 14, 1885.

EDITORIAL.

ALTERATIONS IN ARTERIES AFTER THE APPLICATION OF LIGATURES.

FEW among the many active medical societies of Philadelphia have accomplished results that can be compared with those of the Pathological Society. Since its organization in 1857, its career has been, with the exception of a brief period during the height of the excitement and anxiety attending the civil war, one of uninterrupted activity and usefulness. A new departure dating back a few years, by which specially-prepared papers have been presented at the semi-annual meetings, has led to most gratifying results. For some time these papers were read by active members of the Society, and added to the local interest in the proceedings as well as to the value of the Transactions. Important contributions from the pens of Drs. Cohen, Seiler, and others will not soon be forgotten. More recently the Society has had the good fortune to secure for these semi-annual meetings papers and addresses from active workers in pathology outside the city, and is under obligation to Delafield, of New York, and Sternberg, of the United States Army, for papers of great intrinsic value and of the widest interest as embodying the results of pathological research not only original, but also essentially American. To this list is now to be added an important paper by Professor J. Collins Warren, of the Medical Department of the University of Harvard, read at the last meeting. It is entitled "A Comparison of the Changes in Arteries after Ligature and in the Ductus Arteriosus and Umbilical Arteries after Birth."

This article, which is the result of a long series of personal studies by its author, presents views in some respects wholly at variance with hitherto accepted teachings. Dr. Warren found the earliest changes after the ligature of an artery in continuity to be the formation of a thrombus in the vessel, and the development of a mass of inflammatory tissue or callus around the point of ligature externally. No perceptible cell-action can be observed on the inner wall with low powers during the first week, although occasionally a limited proliferation of the endothelial cells near the point of ligature can be seen with high powers, and a few wandering cells may be found to have penetrated the walls of the vessel at the same point.

In the second week, the bundle of fibres of the adventitia which was held by the knot becomes absorbed, and the two ends of the vessel retract slightly from each other, leaving the ligature embedded in and partly disintegrated by the granulation-cells. At this time the walls of each portion appear to form a complete *cul-de-sac*, as though the healing process were complete. But this is by no means the case, for the beginning of the second stage is marked by the unfolding of the ends of the vessel, the walls of which now separate somewhat after the manner of the opening of a bud, permitting the entrance of a considerable quantity of the granulation-tissue. Disintegration of the thrombus follows, with the formation of an internal callus protected from the blood-current by a small fragment of clot. The ligature may be wholly disintegrated and absorbed, or it may become encysted, or, finally, a small abscess having been formed at its site, the fragments of thread may be discharged through a sinus opening externally. The second stage is completed when the internal growth has reached the neighborhood of a branch. The external callus, which, as in fracture of the long bones, is merely provisional, is ab-

sorbed, and eventually the two ends of the vessel are connected by a slender cord of varying length, the walls being slightly separated by a cicatrix consisting of connective tissue externally, inside of which is another layer consisting largely of unstriated muscular fibres, the surface being covered within by a new endothelium. We have here a scar made up of three layers, resembling closely the three walls of the vessel. A somewhat different series of changes is seen in the large vessels of amputation-stumps. At first the end of the vessel is embedded in granulation-tissue, and contains a thrombus of varying length. In the second week marked changes are observed in the intima, extending some distance from the point of ligature. After several months, the vessel is found in the form of a cord running from the first large branch to the cicatrix of the stump. This cord laid open shows the walls preserved, its interior filled with new tissue in which are spaces occupied by one or more vessels, the condition resembling that known as obliterating endo-arteritis. A comparison of these two modes of healing with the changes seen in the arterial system after birth shows certain resemblances in the two processes.

The ductus arteriosus at the time of birth, in certain important respects, differs in structure from the aorta and pulmonary artery. The media is much thicker than in either of these vessels: it is thrown into irregular folds, which are increased at the time of birth. The outlines between the different layers are less marked than in the walls of other vessels. The lamina elastica is indistinct, and in places apparently wanting. The media consists chiefly of longitudinal layers of muscular fibre, a few circular bundles existing in the outermost layers. A few weeks after birth the greater portion of the walls of the ductus undergo hyaline degeneration, the outer or circular fibres of the media alone remaining. There is at this time an active growth of long, spindle-shaped cells, with staff-shaped nuclei at the edge of the media bordering on the opening into the aorta; there is also thickening of the intima. Eventually the hyaline tissue becomes absorbed, and is replaced by a band of fibres continuous at each end with the media of the large vessels. At the aortic end, in a longitudinal section, the media is seen slightly separated at the point of the cicatrix, and between the two and continuous with them are the longitudinal fibres of the ligamentum arteriosum. In the centre of the depression marking the site of the cicatrix a small vessel is given off into the axis of the ligament, where it either loses itself in a capillary net-work or becomes continuous with a similar vessel coming from the pulmonary artery. Dr. Warren pointed out in detail the points of resemblance between the changes in the ductus and in the hypogastric artery and those seen in the main trunk of an amputation-stump. A slight portion of each vessel is destroyed; both retract, and are attached to the terminal cicatrix by a band of fibrous tissue; both remain as pervious vessels with thickened coats and narrow calibre. In both the process is not unlike that seen in so-called obliterating or compensatory arteritis. Dr. Warren, however, regards "arteritis" as a term hardly applicable to the changes taking place in normal arteries after birth. Nor can the alterations which are developed through the whole length of a large vessel extending a considerable distance from the original seat of inflammation be strictly regarded as of an inflammatory nature. He is disposed also to regard the obliterative growths in terminal arteries in widely-removed portions of the body of the same individual as not of an inflammatory nature, but rather as a secondary and formative process, closely connected with disturbances in the mechanism of nutrition, designed to adapt the vessels to a diminished blood-supply.

THE USE OF ARSENIC IN CHOREA.

ONE of the strongest arguments against the organic-lesion theory of chorea is found in the fact of the remarkable influence exerted upon the disease by the administration of arsenic and by rest. Even occurring in the lower animals, it has been found to be controlled by this remedy. Fowler's solution has been administered hypodermically to a choreic dog with success. In London, at a recent meeting of the Harveian Society, Dr. W. B. Cheadle reported, as the result of an experience in one hundred and sixty cases clinically observed during the last eight years, that the arsenical treatment materially shortened the duration of the disease, cases using it terminating in recovery within five weeks, as the rule; whereas with no treatment they extend from eleven weeks to a year or more.

Its value was recognized by Todd; but, like others since his time, he dreaded its toxic effects. The form in which it is best used is in combination with iron, and Dr. Cheadle prefers the ordinary liquor arsenicalis (liquor acidi arseniosi, U.S.P.) in ordinary doses with tincture of ferric chloride. A series of cases treated with arsenic recovered, on the average, in twenty-nine days; in others, treated with other remedies, its course averaged forty days. Although the remedy is usually well borne in the doses in which it is employed, yet Dr. Cheadle noticed a hitherto-undescribed effect when the arsenic is given to young children, in the form of a bronzing of the skin resembling Addison's disease. The discoloration was most marked on the body in the flexions of the large joints, but not on the face. It afterwards faded away; although in one case the process was very slow. The pigmentation was similar to that produced by chronic congestion of the skin, and was not analogous to the metallic deposit in argyria. The results reported by Mr. Cheadle* are confirmatory of the observations of others; and, while they indicate that arsenic is one of the most efficient of our remedies in the treatment of chorea, it is not to be inferred that the remedy is to be used to the exclusion of chalybeate and other tonics, which have also been found useful as adjuvants.

NOTES FROM SPECIAL CORRESPONDENTS.

LONDON.

THE American physician who for the first time undertakes to look through the many hospitals and medical schools of London must find his task somewhat bewildering. Such, at least, has been my experience, notwithstanding that I brought with me letters of introduction to half a dozen prominent members of the profession here, who have kindly afforded me all the assistance that could be expected of them. The local guide-books mention upwards of fifty hospitals, and I have run across at least one very important institution of the kind which most of them do not describe,—to wit, the Central London Throat and Ear Hospital, of which Mr. Lennox Browne is the senior surgeon. Of medical schools, great and small, there are fully half that number. In fact, nearly every hospital of any consequence has a school connected with it; many of the smallest even have each a little coterie of students who accompany the visiting physicians and surgeons on their rounds through the wards, and have the exclusive right to study the patients therein treated. This system of decentralization doubtless has its advantages for the students, but it has also very manifest disadvantages. The largest city in the world, with a population of about four millions and a vast amount of clinical material, ought to be a centre of medical education second to none. With such an affluence of material, and numerous resident teachers ranking among the first in their respective specialties, it is remarkable that London has no polyclinic or post-graduate school, but sees every year three or four hundred American physicians alone, to say nothing of physicians from other English-speaking countries, including Great Britain itself, pass its very doors and go to Vienna, Berlin, Paris, and other Continental cities, where they have to encounter the difficulties of a foreign tongue in addition to those of the medical studies they desire to pursue. Some day there will probably be a change in this respect, but it is not likely to come soon. Conservatism stamps

* British Medical Journal, October 24.

everything here, and the profession, even if unitedly desirous of centralizing medical education, could not very speedily bring about the necessary changes in the hospital regulations.

Though the schools nominally opened last Thursday, they are not yet fairly settled to the work of the session. Some of the more famous professors, notably Sir Joseph Lister, who is one of the staff at the King's College Hospital, have not yet returned from their vacations. Mr. Bryant, of Guy's Hospital, delivered his first lecture yesterday. His subject was clinical investigation, and, along with much other excellent advice, he earnestly counselled the exercise of the utmost gentleness in all examinations and manipulations.

At the Royal Free Hospital on Gray's Inn Road, connected with which there is a medical school for women, I saw a very neat ovariotomy done on Tuesday last by Mr. William Rose. The tumor was of moderate size, and there were no adhesions. The incision made measured only about four inches. He operated under the carbolic spray, and used the entire Listerian dressings.

Dr. W. S. Playfair is the only gynæcologist or surgeon in London, so far as I can learn, who does the Emmet operation for laceration of the cervix uteri. One of the oldest and most eminent of English teachers in this department of medicine was examining cases the other day before a ward-class and in my presence. One poor woman placed on the table presented a typical case of an old laceration of the cervix, with much swelling of the entire organ, as is usual. It was pointed out to the class as a hypertrophied cervix, and orders were given to have it cauterized. In a subsequent conversation with the professor I found that he was a total disbeliever in Emmet's operation; but what seemed strange to me was that even the fact of the existence of a laceration in such cases was entirely ignored. This is astonishing, when the true state of the case can be so conclusively demonstrated by simply bringing the separated lips together with two tenacula, when the so-called ulceration and most of the hypertrophy disappear.

Last evening I had the pleasure of hearing a very notable discussion at the meeting of the London Obstetrical Society. There were, first, reports by two young gentlemen of peculiar obstetrical cases. One of them described as an extra-uterine pregnancy a case in which both the fœtus and placenta were finally delivered by the way of the uterus and vagina. There had been a lump in the right groin, with symptoms of pregnancy which ceased about the third month. He dilated with sponge tents, and, examining under chloroform, found an empty uterus which measured only two and one-quarter inches. Shortly after this procedure labor came on, and the fœtus and placenta were in due time delivered *per vias naturales*. The reporter was very positive that it was a tubular pregnancy, and that the products were discharged first into the uterus, and thence in the usual way. Some of your readers will doubt this, and so did the wise old heads of the Society. A committee was appointed to investigate the case, and it was particularly insisted that the woman herself should be examined, to ascertain if she might not possess a double uterus.

After this came the *pièce de résistance* of the evening, a paper by Dr. Matthews Duncan on "Lupus of the Vulva." At a previous meeting of the Society, two or three months ago, he had contributed a paper upon the same disease, and this was a continuation of the subject. Four or five cases were narrated of a peculiar affection characterized by elephantoid tumors of the labia and clitoris especially, but often involving the anus also, and showing a marked tendency to undergo ulcerative degeneration. The so-called urethral caruncles were considered by Dr. Duncan to be usually a form of his "lupus of the vulva." Numerous colored drawings representing the cases reported were passed around. The discussion was very spirited and interesting.

Mr. Jonathan Hutchinson, judging from the very full clinical histories and the illustrations, considered the lesions to belong to an aggravated and very intractable form of tertiary syphilis.

Dr. Playfair had seen elephantiasis in India, and when he met with the kind of cases described by Dr. Duncan he treated them as he would treat that disease, considering them practically the same.

Dr. Thin had made microscopical examinations of Dr. Duncan's cases, and had found the disease to be histologically similar to but not identical with elephantiasis. Neither was it syphilis or epithelioma. He found it to be different from those diseases both histologically and clinically. On the other hand, it certainly was not the lupus of dermatologists, —lupus vulgaris. He considered it a disease by itself, which merited a separate name, and could only be classed under the name lupus when that word was used in its old generic sense.

Dr. Duncan, in reply, stood his ground boldly; admitted that the disease he referred to was not lupus vulgaris, but, in his emphatic way, scouted the idea that it was either syphilis or elephantiasis. He announced his intention of reading a third paper upon the same subject at a future meeting.

It should have been stated before that among several other gentlemen who took an incidental part in the discussion was the venerable Dr. West, who was the predecessor of Dr. Duncan in St. Bartholomew's Hospital.

In several of the inaugural addresses at the opening of the medical schools last Thursday, mention was made of recent actions against physicians for certifying to the insanity of persons who were claimed to be sane. Some of these actions, it seems, went against the

physicians, who were mulcted in damages. The profession here is much disturbed over the matter, and it is generally agreed that medical men should all refuse to sign any certificate of insanity until the law is so changed as to protect them in so doing. Your very able London correspondent, Dr. Fothergill, has probably referred to this subject, and therefore it may be an old story to your readers; but you will pardon my calling attention to the fact, in this connection, that Dr. J. Kingston Fowler, in his address at the Middlesex Hospital, urged in forcible terms the identical views as to the relation of physicians to the confinement of alleged lunatics which were broached by the writer hereof in a paper contributed to the *Philadelphia Medical Times* nearly three years ago.* The argument he advanced was that physicians had not asked, and did not desire, to have imposed upon them the purely judicial function of deciding who should be restrained of their liberty on account of insanity; that however much dependence might be placed upon the testimony of physicians—especially upon that of experts in mental disease—as to the fact of unsoundness of mind, the final order for commitment, or at least for prolonged detention, of alleged lunatics should be issued by some magistrate or judge. This idea was elaborated by Dr. Fowler, who proposed, by way of meeting certain objections, that a physician's certificate should still be sufficient warrant for placing a patient under restraint, if need be, in an asylum, but that within forty-eight hours after such a commitment a magistrate should regularly investigate the case, with the help of a competent physician as an expert, and take the responsibility of either ordering his detention or of turning him loose upon the community.

Drs. Ringer and Murrell are still engaged in the very important work of testing experimentally, in the chemical and physiological laboratory, the value of various new drugs which from time to time are claiming the attention of physicians. They have just completed an analysis of the various preparations of pepsin, pancreatin, and malt extracts. Certain well-known American preparations, especially Fairchild's extractum pancreatis, have been found the most active; and, speaking of pharmaceutical matters, it was gratifying to find an American firm of only six years' standing—Messrs. Burroughs, Wellcome & Co.—to have fairly taken the lead among London pharmacists,—or chemists, as they are called here. Their preparations, and full lines of American pills for which they are agents, are now to be seen in nearly every fashionable chemist's shop.

BOARDMAN REED.

October 8, 1885.

* "The Insufficiency of the Laws governing Commitments to Insane Asylums," Boardman Reed, M.D, *Philadelphia Medical Times*, vol. xiii. p. 258.

NEW YORK.

AT the meeting of the County Society for October 26 the present officers were re-elected. Dr. A. Jacobi offered the following amendment to the by-laws, which was adopted unanimously:

"*Resolved*, That the *Comitia Minora* be directed to recommend no applicant for admission to membership unless he be a graduate from a medical college in good standing, or a licentiate of a regular unsectarian State or county medical society of this or any other State; or, if his diploma or license be of sectarian character, unless the applicant declare in writing his or her abnegation of sectarian principles and practice."

The Society wrestled with the question of how to compel delinquent members to pay their dues. With this view the following amendment to the by-laws was passed by a small majority:

"If any member shall fail to pay the yearly dues within thirty days after the fourth Monday in November, when the same shall become payable, it shall be the duty of the Treasurer to serve, in the manner in which notices in suits are required to be served on attorneys, upon each member so in default a copy of this by-law, and a notice to the effect that, unless such dues are paid within fourteen days thereafter, his name and the amount due by him will be reported to the Society at its next succeeding stated meeting, and entered upon the minutes; and if they are not so paid, the Treasurer shall report the same accordingly. At the next stated meeting of the *Comitia Minora* after the date of such report, the *Comitia* may, by order, without further notice, strike from the roll the name of any member continuing in default, and he shall thereupon cease to be a member of the Society; provided that, upon his written application explaining such default, and the payment of all dues to the date thereof, or provided that the *Comitia* unanimously remits the arrears, the *Comitia* shall have power to remit the penalty of this by-law."

The Secretary, in explanation, said that a similar by-law had been found to be very effective in the Bar Association of this city.

Fault has been found with the Medical Register which has been issued for some years by the New York Medico-Historical Society, it being thought especially that it should not omit the names of any of the members of the County Medical Society. Inasmuch, however, as the County Society (as indicated by the amendment to the by-laws proposed by Dr. Jacobi) admits to membership some who are graduates from other than regular medical colleges, the publishers of that Register think they are justified in their course. The outgrowth of all this was the following proposed amendment to the by-laws:

"It shall be the duty of the Secretary to prepare annually, and send to each member

of the Society, a register containing the names, addresses, and office-hours of the active members of the Society,—the register to be prepared at such time and in such manner as the *Comitia Minora* shall direct."

Dr. Jacobi thought it would be better to provide yearly for such a register by special vote rather than by by-law. There was also much other information which he would like to see in the register, and which was not contained in the Medical Register for the States of New York, Connecticut, and New Jersey.

Dr. A. L. Loomis was in favor of issuing a register containing the names of all legal practitioners in New York State and surrounding counties, and offered an amendment to the proposed by-law to that effect. Perhaps Dr. Loomis had in view, when he offered the amendment, to issue a register which would be valuable for general reference, which should not pretend to decide the question as to who were or were not regular practitioners by excluding the names of some who were nevertheless legally qualified to practise; and, being for general use among physicians of all classes, it would command a greater sale and be less a burden to the Society. It became evident, however, that the work and expense of such a register would be great, and it was therefore somewhat hastily decided to refer the whole matter to the *Comitia Minora* with power. What power the *Comitia* now has in the matter is probably a question in the minds of many; but no one imagines that it will decide at present to issue more than a register of the Society's membership.

WASHINGTON.

THE PUBLIC-HEALTH ASSOCIATION—MUSEUM OF HYGIENE—SMALLPOX INSPECTION SERVICE—WASHINGTON OBSTETRICAL SOCIETY—MEDICAL AND SURGICAL HISTORY OF THE WAR—PERSONAL.

WASHINGTON, November 4, 1885.

THE Committee of Arrangements of the American Public-Health Association is actively at work preparing for the coming meeting of the Association in December. The sessions will be held in Willard's Hall, attached to Willard's Hotel, where the headquarters of the Association will be. President Cleveland has been invited to attend the opening session, and has signified his intention of being present. The Commissioners of the District of Columbia will also attend, and Mr. Edmunds, the President of the Board, will make an address.

The rate of fare on all railroads south and west of New York, except the Chicago and Northwestern, will be reduced to two-thirds of the regular rate for the round trip for members.

After the adjournment, an entertainment in the shape of an oyster-roast will be tendered the visiting members and their friends by the local committee. It is expected also that President Cleveland will hold a public reception during the meeting.

At the Museum of Hygiene attached to the Navy Department, an elaborate series of experiments upon the siphonage of traps is now being made. The observations will soon be completed, and the results then made public.

A strict inspection of passengers and baggage is being enforced on the Canadian frontier to prevent the introduction of smallpox from across the border. It is believed that no infected persons have gained entrance to this country since the inspection service has been established. The service is under the general direction of the Supervising Surgeon-General of the Marine Hospital Service, but local appointments are made only upon the recommendation of the respective State Boards of Health.

The recent election of officers in the Washington Obstetrical Society resulted as follows: President, Dr. A. F. A. King; Vice-Presidents, Drs. W. W. Johnston and J. Taber Johnson; Recording Secretary, Dr. C. H. A. Kleinschmidt; Corresponding Secretary, Dr. S. S. Adams; Treasurer, Dr. G. B. Harrison.

The final volume of that monumental work, the "Medical and Surgical History of the War," is in an advanced stage of preparation, and is expected to be ready for the printer before the end of the year. Dr. Charles Smart, of the army, is writing the volume. It will be illustrated by many fine colored plates, like the other volumes in the series.

Dr. D. L. Huntingdon, of the Surgeon-General's Office, who has been absent in the West for about a month, has returned, and is again on duty here. G. H. R.

PROCEEDINGS OF SOCIETIES.

AMERICAN ACADEMY OF MEDICINE.

THE Ninth Annual Meeting of the American Academy of Medicine was held at the hall of the New York Academy of Medicine, October 28 and 29, 1885.

FIRST DAY, AFTERNOON SESSION.

The President, Albert L. Gihon, A.M., M.D., in the chair. The meeting was opened with prayer by Rev. Mr. Vandycke.

Dr. R. L. Sibbet, of Carlisle, Pennsylvania, read a paper on

THE STUDY OF MEDICINE AS A MEANS OF EDUCATION.

In Canada there were twelve medical schools, all of them regular. In the United States there were eighty-seven schools teaching rational medicine; the number of those engaged in teaching sectarian medicine was twenty-five. Sectarian medicine might be regarded as an American product, the first

school of the kind being established about fifty years ago in Pennsylvania. There was no need under any circumstances of rational medicine affiliating with sectarian medicine. The necessity of a preliminary and classical education was dwelt upon. As a rule, he said, preliminary examination was not required; classical studies were generally treated with indifference; the degree of M.D. was often conferred upon persons without even a knowledge of English grammar or orthography. No medical school in this country had adopted a higher standard than Harvard, yet here the standard was much lower than that required in the same institution for admittance to the freshman's department. The general practitioner, he said, if called upon in court to define the mind, could tell as little about the faculties of the mind as about the heavenly constellations. The author favored State medical boards of persons who would examine aspirants in general as well as in medical branches of knowledge.

MEDICAL SUPERVISION IN STUDENT-LIFE.*

Dr. Henry O. Marcy, of Boston, then read a paper on

THE CLIMATIC TREATMENT OF DISEASE, WITH THE ILLUSTRATION OF NORTH CAROLINA AS A HEALTH-RESORT.

Sanitation, in view of our knowledge of the influence of micro-organisms, had passed from the realm of theory and become based upon fact. Pure air, pure water, and pure soil now meant air, water, and soil free from infectious elements of disease. Enough was known of the bacillus tuberculosis to show that it could exist in all countries and climates, but its development was favored by cold, damp localities. Dr. Denison's climatic maps were shown, and some of his observations on the influence of altitude and other conditions of climate on the consumptive were quoted with approval. Clinical experience taught that, for those who were able to endure it, active out-of-door exercise in an elevated region exerted a beneficial influence upon the respiratory organs of the phthisical. The special advantages and physical features of the Blue Mountains of North Carolina, especially those about Asheville, were then pointed out. The temperature never became extremely warm or extremely cold; it seldom rose above 85° F. At places there was no frost during the entire year. The water was pure; the surroundings were beautiful and inspiring.

At 8 P.M. the President, Albert L. Gihon, A.M., M.D., read the following address on

WHAT IS MEDICINE?

The place of the Academy is not to be sought among the pathological, clinical, sanitary, and other national associations. It antagonizes none of these, but seeks to cement all into a compact unity.

Reasons for the slow growth of the Academy are:

In the first place, the fundamental condition of membership restricting Fellowships to graduates in medicine who have received degrees in letters in course.

As the co-operation of every educated man interested in the objects of the Academy is desirable, I am of opinion that the time has come when every limitation to Fellowship should be removed, except the solitary requirement that the candidate shall be in fact, as in title, "learned in medicine," and in all else that that implies; but would make it impossible for any one unfit or unworthy, though he come with an armful of diplomas, have subscribed to the most inflexible of codes, and no matter what faculty, society, or institution he may be delegated to represent.

Nominations should be accompanied by the fullest record-evidence, and be made long enough in advance—three, six, nine months, or a year—to enable the Council to determine each man's fitness.

A second reason why the Academy has not met with more pronounced sympathy and support is its necessarily hostile attitude to institutions and individuals who defy the principles of its constitution.

The Academy encounters a third obstacle in the lukewarmness of quasi friends,—some damning it with faint praise, and others exuberant in private but chary of public endorsement. An instance was given of a medical editor who could not follow his wish in this respect through policy; but the editorial columns of the medical press were usually pre-eminently high-toned. Publishers were inconsistent in permitting under the same cover advertisements of medical concerns, drug-factories, and proprietary clap-traps. Why should the business-venture of men who get up sham colleges be advertised in reputable journals? The *Medical Record* commends the resolution of the Florida Medical Association against the establishment of a medical college in that State. These encouraging signs of the times may be taken as offsetting the fact that thirty-nine of the eighty-seven regular schools in the United States are only fifteen years old, and twenty-one not over five. Trashy contributions from illiterate M.D.'s are published because they have been subscribers. If journals only reflect sentiment, let us ask ourselves the question, "What is medicine?"

If we look to this Academy for the answer, it will be limned clearly enough as the most profound and ennobling study which can engage the intellect of man. This, however, is not the popular idea. In their view, medicine is only something in a box or bottle prescribed by a man or woman who has acquired more or less skill in administering the partic-

* Will appear in the next issue of the *Times*.

ular remedy appropriate for each disease,—like other servitors whose offices are called for by the disagreeable incidents of humanity, only tolerated as a necessity. Sham aristocrats look down upon them; the plutocrat hires them as he does cook and coachman. In military and naval services he is sought to be degraded. The ministry of the suffering and afflicted is nowhere regarded as an outcome of the study of the stupendous and sublime mysteries of existence. In the national councils, in military and naval organizations, in civic administrations, who thinks of giving a *first* place to the physician, though his are the mental attainments which fit him best for counsel in all that concerns the welfare and progress of the human race?

The science of medicine involves the knowledge of everything that relates, however remotely, to the existence of man,—his place in nature, his origin, growth and development, preservation and continuance. The prevention and cure of those abnormal conditions which tend to his destruction are but one chapter in the volume which, coming near the end, cannot be read understandingly without the thorough comprehension and diligent study of all that precedes. Medicine is so far-reaching in its sources, and so concatenated with every other branch of knowledge, that he who would begin its study must first have drunk deep of the well-springs of human knowledge. Medicine is a science of such proportions that only a well-educated man can master it. Is this the view of it entertained by the profession at large? What are the facts?

Let us see how the profession is recruited. Ordinarily, a youth becomes a doctor, as he weds, from a whim; and those no longer young because, having failed in other occupations, they hope to make money by this,—knowing nothing of its responsibilities and requirements, without aptitude, ignorant and illiterate. Such a one goes to college, and as a first-course student listens to lectures on anatomy, practice, chemistry, surgery, etc., one after another, and without understanding a word of the technical language.

Seventy-nine colleges require evidences of preliminary education,—this only specious in most. Recent instances of illiteracy on the part of graduates before examining boards: "colume of murcury," "cours at Beleview," "anylitic," "assend," "admition," "diameter of the earth ninety-two thousand miles," "the Field of the Cloth of Gold some kind of tapestry," "an alterative acts like food on building up system and are favored in their action by stomachic or anything which arouses the system to action." Could the man who after graduation says "was began," and spells "gravatation," "femeral," "superating," "corpusels," etc., have ever comprehended the language used by his teachers?

Why should medicine be cheapened to every purchaser, and the college debase its teachings to their limited understanding? A collection of theses presented to American medical colleges during the last five years would be more entertaining than "English as She is Spoke." Only the utter ignorance of elementary chemical principles by the men who study medicine has made chemistry one of the seven chairs. It properly belongs to the academic course.

What only can medicine be to the ignorant members who are annually mustered into the ranks of the profession? To these men it can have no other aspect than that of a trade. They entered upon it as a money-making vocation; it was taught them as a source of pecuniary profit; they practise it for the fees they get.

Manifestly, then, medicine is not the same to all men, even medical men. If improper men can be excluded from national societies, why not from State, county, and city medical societies? This should be done for the protection of the community. Where a drug-clerk kills one victim by his carelessness, he saves a hundred by recognizing errors in physicians' prescriptions. Example from apothecaries' files:

℞ Solid ext. cannabis indicus, ʒj;
{Syr. pruni Virg., } ℥j;
{Syr. wild cherry, } ℥j;
Tr. opii, ʒiij;
Tr. opii camp., ʒj;
Aquæ, q. s. ℥iij. M.

Ft.—Tablespoonful doses to allay headache from coughing.

The debasement of medical education to the capacity of the ordinary purchaser of a diploma will eventually cause the profession to deserve the reproaches of its deriders. The public gauge the profession by the men with whom they most come in contact. The wise physician does not hesitate to say, "I do not know." The typical doctor affects an omniscience in inverse ratio to his knowledge.

Until the mystery of the first departure from health is made clear, all our therapeutics must be empirical and fundamental methods of cure all speculative. If we have not learned where disease begins, we have at least learned that the follies, vices, and errors of man have in their wake a multitude of ills, and these we can prevent; and the wise physician, learned in all that pertains to the normal life of the body, aims to protect it from those evil influences which experience has taught him will do it harm.

Preventive medicine has at last obtained recognition as the highest aim of the physician's art. It establishes new relations of the physician to the social system. It is not creditable to the intelligence of the age that in the department controlling internal affairs, among bureaus of labor, statistics, agriculture, education, etc., there is no bureau of public health. All sanitary service is the proper duty of med-

ical men. Preventive medicine has more to do than ward off epidemic visitations of great scourges. Its most important duty is to consider the impairment of health of growing children through the sanitary defects of our school system. The prevention of insanity, repression of crime, etc., are its legitimate duties. It is too much to expect antidotes for every microscopic germ. The tiny swarms around us are at once our friends and foes. If we do not antagonize them, they purify the air we breathe, the water we drink, the soil we tread, and prey upon our natural waste. Only our own folly causes them to turn and rend us.

Prone to hasty generalizations, we inconsistently denounce the doctrinaires who affect to believe in the panurgic virtue of similars, and ourselves find cure-alls in quinine, cocaine, germicides, etc.

Hence the greater need of impressing upon the tyro in medicine the fact that there are underlying principles never to be lost sight of. The old chair of Institutes of Medicine has gradually been supplanted by Principles and Practice. If I would banish Chemistry and Physics from medical colleges, I would establish a chair of the Philosophy of Medicine, and appropriately include the history of medicine, medical literature, medical jurisprudence, and medical ethics.

Reform is hampered by adherence to existing models. It will not do merely to establish adjunct chairs. The starting-point must be the requirement of a thorough preliminary education, to include an intelligent comprehension of the facts of chemistry and physics, of natural history and physical geography, of mathematics, languages, and belles-lettres. Four annual terms are necessary. Descriptive anatomy and the materia medica are enough for the first year; histology and practical microscopy, physiology in all its relations, and the mechanical processes of pharmacy, for the second; hygiene, general pathology, and general therapeutics, for the third; special pathology, special therapeutics, the philosophy of medicine, medical history, jurisprudence, and ethics, for the fourth. A fifth year to be devoted to clinical experience under supervision in public institutions.

Medicine has no need to rear its superstructure on any other foundation than the broad basis of fact. It has been dragged down to the level of commonplace occupations through the dissensions incited by the dogmas of theorists. There is no parallel between theological sects and medical "pathies." There is danger of too diffuse a system of differentiation. The tendency to degradation will be counteracted by more catholic views of morbid phenomena. The general practitioner will pay less heed to the artificial groupings of the nosologies, and look only to the grade of action exhibited by the pulse, the condition of the organic fibre, and the state of the secretions, no matter what name be given to the disease. When all physicians stand on the plane of higher medicine, there will be less tendency to diverge into extremist classes.

Is our estimation of medicine visionary, and have we sought the impracticable? Must we silence our voices because few care to hear, and cease our efforts because the task is difficult? Must we tread the beaten track lest we offend prejudices, antagonize pecuniary interests, and upset established orders? Not on this account shall we hesitate, if the truth be with us. The ethics of medicine rightly denounces fraternity with charlatans and quacks. Is our dishonor less if we degrade our noble profession by admitting to its rights and honors those who are ignorant, illiterate, and incompetent?

After the reading of the address the annual collation was served.

THURSDAY, SECOND DAY.

The Society was called to order at 10 A.M., by the President.

Dr. Thomas J. Turner, Medical Director of the United States Navy, read an interesting paper on

MEDICAL EVIDENCE.

It was followed by

REPORT ON LAWS REGULATING THE PRACTICE OF MEDICINE IN THE UNITED STATES AND CANADA,

by Dr. Richard J. Dunglison, of Philadelphia, and Dr. Henry O. Marcy, of Boston. It appeared that restrictive regulation regarding the practice of medicine had been made during the past year in only two States, —namely, Indiana and North Carolina. Letters from various prominent physicians throughout the States had been received, in most of which dissatisfaction was expressed at the present state of the laws regulating the practice of medicine.

HEALTH OFFICERS, ANCIENT AND MODERN.

Dr. Benjamin Lee, Secretary of the State Board of Health of Pennsylvania, read a paper with this title. The important position assigned to hygiene and State medicine during the past decade was evidence at once of an advanced stage of civilization and of dense and rapidly-increasing population. It indicated that the statesmen and the nation had at length reached that higher plane of political science in which they could appreciate Lord Beaconsfield's statement that "the health of the people is the first duty of the statesman."

After considering the health-laws as they had existed in Rome and in other cities, the author gave some suggestions with regard to how to establish an ideal board of health. The first point which he would make with reference to the organization of local boards

of health was that politics, in the bad American sense, should be utterly excluded. If there was any place where politics had no business, it was emphatically in a board of health. The fitness of the individual, and not his political opinion or his value as a ward-worker, should be the test. It followed from this dogma, which he regarded as fundamental, that boards of health should not be elected by the people,—certainly not in large cities. Boards of health should consist chiefly of physicians. Nor should what was called medical politics—the influence of schools or of cliques and dogmas—be allowed to interfere. The medical members should be graduates of a respectable regular school, of not less than three years' standing in the practice of the profession, and, if possible, they should be chosen from among those who had given attention to sanitary science. It was quite essential, however, that they be not all physicians. At least one member of the board should be a man eminent among his fellows for prudence and judgment in trade and commerce, for doctors were proverbially poor business-men. Emergencies constantly arose in which there was an apparent conflict between the interests of commerce and those of health. It was also desirable that one of the local municipal authorities be on the board. There should also be an agent constantly employed to make investigations regarding the sanitary condition of all localities under supervision of the health board. This person should be a most trusted and respected physician and sanitarian, and he should receive sufficient pay for labor performed. In his ideal board all the members should receive a fair salary.

After a recess, Dr. Samuel N. Nelson, of Cambridge, Massachusetts, read a paper on

MICRO-ORGANISMS AND THEIR RELATION TO DISEASE,

in which he reviewed the labors of German and other bacteriologists in seeking to discover special germs as the cause of various diseases. While we were not yet in a position to express a definite opinion as to the relation of micro-organisms to disease, the author inclined towards the germ theory.

OBSERVATIONS ON THE RELATION OF BACTERIA TO CERTAIN PUERPERAL INFLAMMATIONS.

Dr. Ernest W. Cushing, of Boston, based his observations on the results of examinations of the bodies of such women as had died from these maladies in the general hospital at Vienna last spring. He called attention to the great difference between the rules governing the obstetrician, his assistants and students, in Berlin and in Vienna, saying that in the first-named city every precaution was taken to avoid both direct infection and the possibility of carrying germs in the hair, clothing, etc., as if there might be germs in the air. In Vienna, although the possibility of their existence in the air was admitted in theory, in practice the assistants and students were allowed to be present at autopsies; obstetric operations and laparotomies were performed before classes without spray, and the chief assistant gave an operative course on the cadaver every afternoon, relying for safety on washing, bathing, and change of clothes.

The results obtained by simply avoiding direct infection on the fingers and instruments were used by Dr. Cushing as an argument that puerperal fever was not an entity the poison of which was carried about by the air, entered by windows, was inhaled by the lungs, etc.; but that such fevers were the result of the invasion and multiplication of bacteria received from infection of the uterus or abraded vagina, as a rule, directly from hands, instruments, or applications. From an examination of the bodies mentioned, it would appear that the most frequent cause of infection was the streptococcus; next the staphylococcus; and, lastly, the bacillus pyogenes fœtidus. The former occurred in chains, not distinguishable from those of erysipelas, the cocci lying in pairs, each pair representing a link. The staphylococcus occurred in bunches like those of grapes. One or more of these were found in all acute cases examined, and were present in the uterine or iliac veins, in pelvic abscesses, in the lungs or joints, and, in fact, wherever metastatic abscess occurred.

Dr. Cushing showed microscopical preparations of these different cocci, and gave illustrative cases. He compared puerperal inflammation to infected wounds, and advised active hopefulness with regard to treatment, which, in order to be successful, should be analogous to that of surgical wounds: prompt removal of decomposing matter, evacuation of pus, cleansing and disinfecting douches, and drainage.

This paper was briefly discussed by Dr. R. Stansbury Sutton and Dr. Henry O. Marcy. Dr. Sutton thought the main object was to secure cleanliness. To do this, he would not employ chemical agents in the abdominal cavity, as, by leading to the risk of poisoning, they were more likely to do harm than good; but we could not omit cleanliness. Tait's success was based upon the fact that he secured perfect cleanliness.

Dr. Marcy thought also that Mr. Tait's success depended upon his ability to secure cleanliness, relying largely upon his wife in caring for the sponges, etc.; but he thought Mr. Tait did the cause of surgery harm and himself injustice in depreciating the importance of antiseptic methods. Success was most likely to be with him who took the greatest pains to carry out to the fullest extent antiseptic precautions, while he who spoke disparagingly of these would be least likely to

obtain perfect cleanliness, and would meet with failures.

MEDICAL LICENSES AND MEDICAL HONORS.

Dr. Edward Jackson, of Philadelphia, read the paper, and said, "When, one hundred and fourteen years ago, the founders of the University of Pennsylvania and the authorities of King's College, New York, conferred upon six young men the degree of Doctor of Medicine, it meant one thing; when, in this present year, the hundred odd medical colleges of the country conferred upon each of three thousand men and women the degree of Doctor of Medicine, it had come to mean something else.

"So far as State licenses were concerned, they only fixed the minimum amount of knowledge which would be tolerated in a practitioner of medicine: such a license was not honorary. The only good reason for State license was to protect the community from incompetent men. It was doubtful whether any system of State license to pursue a certain calling should be looked upon with much favor; and surely such a license, to be anything but an injury and a hinderance to the advancement of the profession and a delusion and a snare to the laity, should be removed from all possibility of competition, and disinterestedness secured by able and honest examiners and great publicity. The State license should be granted, if at all, directly by State authority. The power should not be delegated to irresponsible competing corporations. Medical honors should be considered of value only when taken in connection with the associations leading to their conferment, or when coming from an institution which had worked its way up to general and popular favor, and which conferred honors only for high professional merit."

A paper entitled "The Physician and his Patient," by Dr. John Devin Kelly, of Utica, New York, and one on "Sketches of Some of the Original Members of the Delaware State Medical Society," by Dr. Lewis P. Bush, of Wilmington, were read by title, which ended the scientific work of the session.

At the close of the business meeting, it was announced that the following officers had been elected for the ensuing year:

President.—Dr. R. Stansbury Sutton, of Pittsburgh.

Vice-Presidents.—Drs. Lewis P. Bush, of Delaware; S. J. Jones, of Illinois; R. L. Sibbet, of Pennsylvania, and F. H. Gerrish, of Maine.

Secretary and Treasurer.—Dr. R. J. Dunglison, of Philadelphia.

Assistant Secretary.—Dr. Charles McIntire, Jr., of Pennsylvania.

Honorary Members.—Drs. Henry H. Smith and S. Weir Mitchell, of Philadelphia.

The next place of meeting will be Pittsburgh, Pennsylvania.

PHILADELPHIA ACADEMY OF SURGERY.

AT a stated meeting held November 2, 1885, D. Hayes Agnew, M.D., President of the Academy, in the chair, Dr. R. J. Levis read a communication entitled

NOTES ON NEW ANTISEPTICS, HYDRONAPHTHOL AND POTASSIO-MERCURIC IODIDE.*

DISCUSSION.

Dr. S. W. Gross: Dr. Levis has made the statement that the potassic mercuric chloride is a far safer germicide than the ordinary mercuric chloride. The solution of one to twelve thousand is really not so much weaker, if we look at it properly. The potassic mercuric chloride is dependent for its activity on the biniodide of mercury. It is a well-established fact that the biniodide of mercury is a far more powerful germicide than is the bichloride. Because we use a weaker solution is no evidence that it is not as strong as the bichloride. I can see no advantage in making the potassic mercuric chloride solution, unless it is to fix the biniodide. In preparing the solution of corrosive sublimate in which we wish to keep gauze, sponges, etc., for a long time, we add to it seven and one-half grains of chemically pure chloride of sodium, with the view of fixing the bichloride so that it will not be converted into calomel. The addition of an equal part of iodide of potassium to the biniodide will fix that salt so that it will not be decomposed. There is therefore really no advantage in it, except to prevent changes in the biniodide.

Hence this is not a new remedy, for the biniodide has been used as a germicide. I do not see any advantage in using a stronger substance in what is apparently a weaker solution. It is, of course, impossible to say anything as regards the constitutional effects, for Dr. Levis has not had sufficient experience to determine whether or not toxic symptoms are produced by this agent. There is no reason why—if the potassic mercuric chloride is used as carelessly as the corrosive sublimate often is—there should not be toxic symptoms produced. If the cases of poisoning with the bichloride of mercury which have been reported are examined, it will be found that the bichloride has been used in unusually large quantities. For example, a one to one-thousand or one to two-thousand solution has constantly been used as a fluid to irrigate the wound during a surgical operation. Again, in psoas and iliac abscess, where a large quantity of the solution has been introduced after the evacuation of the pus, toxic symptoms have arisen. If a little care is exercised, there is no reason why toxic symptoms should arise from any of the mercuric solutions.

In regard to hydronaphthol, I know nothing of it from experience. I, however, know

* See page 126.

that Dr. Fowler has been making experiments with it for years, and, even after the adoption of the mercurial solutions, used saturated compress with naphthaline outside of the corrosive-sublimate dressings to keep the wound enveloped in the vapor of naphthol, according to his statement.

Dr. R. J. Levis: Dr. Gross will bear in mind that with the potassic mercuric chloride there is only one-fifth the amount of mercury used. We know that the mercuric bichloride is an unstable salt in the way in which it is generally used, and for ordinary uses it can hardly be made a stable salt.

Dr. S. W. Gross: It is a stable salt. A solution of corrosive sublimate in water can be kept for a week without any change. To make a stable solution for sponges and dressings, it is better to add chloride of sodium.

Dr. R. J. Levis: I used the term unstable with reference to the mercuric chloride in contact with organic matters. Under such circumstances it is liable to be converted into ordinary calomel.

Dr. S. W. Gross: This is a mistake. Corrosive sublimate does not become unstable in the presence of organic compounds. This has been asserted, but there is no proof of it. If it did undergo this change, why do we have toxic symptoms arising when large quantities of the solution are injected into abscess-cavities?

Dr. J. M. Barton: As regards stability, the mercuric chloride does not seem to undergo any chemical change. At the same time, it undergoes some change when brought in contact with organic matter. If this were not so, a large mass of odorous material could be disinfected with half a grain of corrosive sublimate.

Dr. Charles W. Dulles: It is well known that the salts of mercury in the presence of albumen are apt to be converted into albuminoids, but this does not prevent the constitutional effect of mercury. I believe that this change is not in sufficient quantity to interfere with the antiseptic properties of the substance. The effect of the potassic mercuric chloride in the presence of albumen is somewhat similar. Dr. Oliver, who has made some extensive experiments in regard to albumen in the urine, has found that this potassic mercuric chloride is the most delicate test for albumen.

Dr. S. W. Gross: In corroboration of what Dr. Dulles has said, I would recall the fact that when Lister began the use of corrosive sublimate he employed a solution which was too strong, and found that a certain amount of erythema and vesication was produced. He now procures the serum of the blood of a horse and makes his solution in that way.

Dr. Addinell Hewson: I have had some experience with hydronaphthol, but I have seen it produce irritation, and even such erythema as was alarming. This was a solution of one to two thousand. The effects were produced within twenty-four hours. The patient experienced constant distress from the time of its application.

Dr. R. J. Levis: I have found the one to two-thousand solution almost tasteless. I have placed it in one eye without being conscious of its presence.

Dr. Addinell Hewson: In this case there was a tendency to erythema, and the result undoubtedly proved that the remedy had no effect as a germicide.

Dr. Levis: That is not claimed for it.

Dr. F. H. Gross reported a case of laparotomy.*

A SUTURE FOR THE APPROXIMATION OF DEEP WOUNDS.

Dr. R. J. Levis: I wish to call attention to a suture to be used in place of the buried suture. Every surgeon recognizes the advantages of approximating the surfaces of wounds as conducing to healing. We have all been too much satisfied with approximating simply the edges of wounds, without paying attention to the approximation of the deeper parts. In amputations and in the removal of tumors from such situations as the groin and axilla, large spaces are left which may become filled with blood, serum, or the products of inflammation. Since the introduction of antiseptic surgery, and particularly since the use of animal sutures has been adopted, some surgeons have used what are called buried sutures. These have their disadvantages, and sometimes it is difficult to apply these sutures so as to secure complete approximation.

Some time ago I devised a simple plan of approximating the deeper parts of a wound. Taking an amputation-wound for illustration, to approximate the flaps in this manner I take an ordinary silver wire armed at each end with a straight needle, introduce one of the needles into one flap at the bottom of the wound, and bring it out about half-way between the angle of the wound and the edge of the flap. It is then carried across the wound and through the opposite flap. The second needle is then carried through in the same manner. A figure of 8 is thus formed. When the ends of the wire are drawn upon, the deeper portion of the wound is approximated. The superficial portions of the wire are then carried across the wound and bring the edges together. Superficial sutures are also introduced. I have used this in a number of amputations, and think it particularly applicable to the closure of wounds after the removal of large tumors of the breasts where the axillary glands are also removed. In a case in which I removed the breasts four days ago there is now complete union. I insert as many of these sutures as may be necessary.

* Will appear in the next issue of the *Times*.

I have always used wire, but ligature rendered antiseptic would probably be almost as good.

Dr. J. Ewing Mears: In deep wounds of the axilla, what tissues do you approximate?

Dr. Levis: Fatty tissue, muscular tissue, or whatever may be necessary.

Dr. Addinell Hewson: I have used the suture of Dr. Levis frequently, but I have used it without the addition of superficial sutures. I employ, instead, collodion and gauze. This I find more satisfactory. I have had direct union through a stump without any suppuration whatever, on more occasions than one.

Dr. S. W. Gross: I have seen Dr. Levis apply this suture, and it does approximate wounds in a most excellent manner. It is very easy to get the suture out. It is very desirable to get rid of the presence of any foreign body in the wound. Neuber, the introducer of the decalcified-bone tubes, recognized their inconvenience, as well as the disadvantages of the ordinary rubber drainage-tube. It was he who proposed buried sutures. He also resorted to other means of drainage. In amputation of the breast he occasionally punched holes in the skin to allow free drainage. In removal of axillary tumors he inverted the skin on each side, attaching the anterior portion to the pectoralis major and the posterior to the latissimus dorsi, thus making a funnel-shaped opening through which drainage could be effected.

Dr. T. G. Morton: During last winter, something similar to this was proposed by Dr. Packard at the Pennsylvania Hospital. He suggested the introduction of a long pin across the stump, and then the application of a figure of 8 around, making careful compression. This would answer very much the same purpose.

Dr. R. J. Levis: This suture might be called the duplex suture or the deep crossed suture. I think it would be very suitable in the high operation for stone, the deep portion of the suture including the bladder and the superficial portion, including the superficial tissues.

PIN FOR TREATMENT OF FRACTURE OF THE PATELLA.

Dr. Morton: I wish to exhibit a pin which I have used in the treatment of fractured patella. For a number of years I have been using the ordinary Malgaigne's hooks and the modified Malgaigne's hooks. It occurred to me that if I could pass a steel pin and keep the fragments approximated I should have an easier method than with the hooks. I devised this pin, which has a detachable handle and works as an ordinary Brainard's drill. In the case in which I applied it the pin went through without difficulty. Over the extremities shoulders were applied. The fragments were then not disturbed for three weeks. There was not the slightest irritation. Lead-water and laudanum were kept applied. When the pin was removed, I found under one of the shoulders a small collection of pus. In order to obviate this, I have had a shoulder made which does not come in contact with the skin at a right angle. To avoid the possibility of pulling any pus into the bone when removing the pin, I have made it in two pieces, united in the middle with a screw. When it is desired to remove the pin, the parts are unscrewed and the two pieces removed. I have had less trouble with this than with any other method of treating fractured patella.

In introducing the pin I did not employ any anæsthetic, and the patient made no complaint. The whole manipulation did not occupy over fifteen seconds. It is impossible to apply Malgaigne's hooks without an anæsthetic. I was surprised at the ease with which the pin passed through the bone. It met with no more resistance than it would in going through a hard Boston cracker.

I was unable to apply the pin until thirteen days after the fracture, on account of the effusion within the joint. I have never put on the hooks until all local irritation has subsided.

In this case I do not think that there is bony union. I have never seen bony union where there has necessarily been delay, but there is here exceedingly close union.

Dr. William W. Keen reported a case of

OBSTRUCTIVE JAUNDICE—CHOLECYSTOTOMY FOR IMPACTED GALL-STONES.*

DISCUSSION.

Dr. William Hunt: What has been the success following this operation?

Dr. Keen: I have not had time to gather the cases together; but when I prepared my paper last year there were thirty-eight cases, with eight deaths.

Dr. S. W. Gross: The percentage of deaths after cholecystotomy is eighteen. The percentage of deaths is far greater than after removal of the gall-bladder, or cholecystectomy.

Dr. J. Ewing Mears: This case serves to confirm what every one who has had anything to do with abdominal surgery believes,—that it is frequently impossible to tell what will be found in the abdomen before it is opened. This case was carefully examined before operation, and what was supposed to be the gall-bladder was outlined; but, when the abdomen was opened, this proved to be the left lobe of the liver. This may be regarded as one of the most obscure cases of cholecystotomy that has yet been performed. In the reported cases there has been no difficulty in locating the position of the gall-bladder.

Dr. W. W. Keen: In the three prior operations which I had done, there was no difficulty in finding the gall-bladder.

DEFORMITY OF THE UPPER EXTREMITIES.

Dr. W. W. Keen: I have here a patient with a deformity of the upper extremities,

* See page 123.

which I suppose is due to rickets. Precisely similar conditions I have never before seen. This girl is in her fifteenth year, a mulatto, tall and rather slender for her years. One year ago she began menstruating, and at the same time noticed the commencement of the changes which are now most distinct in the right wrist. There is also marked angular deformity at the elbow. Feeling the olecranon process, there is found considerable relaxation of the ligaments, allowing the ulna to be moved in different directions. In the wrist there is apparently no mechanism which would account for the deformity present. The deformity of the left wrist can, with the exercise of considerable force, be reduced. I would call attention to the ease with which the deformity of the elbow would be overlooked. When the hands are pronated it is not seen: it is observed only in supination. The other bones of the body are free from evidences of rachitis. There is no trouble about the head, no beading of the ribs or enlargement at the ankles. There is no evidence of inherited specific disease: the father died of consumption, the mother is living and perfectly healthy. There is no evidence of specific disease to be found in the condition of the teeth.

Dr. Charles W. Dulles: Would this not be more properly called a case of osteomalacia? Rickets is an affection of the bones in the progress of their growth. Osteomalacia is the term applied to the condition in which bones, having attained their proper development, undergo softening.

Dr. Keen: The bones are not curved to any extent, and in no other bone is there a tendency to softening.

Dr. R. J. Levis: My opinion is that the case is really a neurosis. I look on it as a paralytic condition rather than a true bone-affection. It is analogous to some forms of club-foot, and particularly to knock-knee and the like, which, we know, occur from irregular muscular action.

Dr. W. W. Keen: I cannot understand how this condition could be due to muscular action, either paralysis or contracture. There is no evidence of such a condition. No muscle is tight, and no muscle springs into relief at any point. The muscles seem to act properly, and the trouble appears to be in the bony system. In consequence of the change in obliquity, the muscles which go across as chords of the arc tend to increase the deformity.

My attention has been drawn to the diminished size of the head of the radius. This might have something to do with the deformity at the elbow, but it could have nothing to do with the condition of the wrist.

Dr. William Pancoast: I noticed that, on pressing the radius firmly against the ulna, a grating could be produced. This was elicited only on firm pressure.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING, OCTOBER 1, 1885.

The President, B. F. BAER, M.D., in the chair.

DR. WHARTON SINKLER read a paper on

THE DIFFERENT FORMS OF PARALYSIS MET WITH IN YOUNG CHILDREN.

The most frequently met form is infantile paralysis, or *polio-myelitis anterior*. This term indicates the pathology of the disease, which is an inflammation of the nerve-cells of the anterior horns of white matter of the spinal cord. This affection may come on at any period of life, but is generally seen in children, and usually at the age of two years. The children are generally strong, and apparently healthy, and the paralysis is sudden in its onset. Fully two-thirds of the cases I have seen have been attacked in the summer months, hot weather and teething seeming to be predisposing agents. Dr. Barton, of Manchester, England, reports that of fifty-three cases in which he noted the time of onset, twenty-seven occurred in July and August. The attack is preceded by fever of greater or less intensity, with pain in the head and limbs, with general soreness when moved or lifted. After a few days, paralysis, more or less complete, occurs; but subsequently a regression of the paralysis from some of the affected parts occurs. Sensation is undisturbed. Atrophy of the muscles is soon apparent; in fact, the paralyzed portion stops growing for a time. The temperature of the affected portion is low, and the skin is blue and mottled, but there is no tendency to ulceration, and wounds or scratches heal readily. The skin and tendon reflexes are lowered or abolished in the affected limbs. At first response to the faradic current is lost, and later on the galvanic current produces but little muscular contraction, except when a powerful current is used. When atrophy has set in, the reaction of degeneration is seen. Most of the cases of club-foot are the result of infantile palsy. Deformities of the upper extremities are rare, this disease differing in this respect from cerebral palsies. The exact causes of infantile palsy are unknown. Over-fatigue often precedes an attack; sudden chilling is considered by Seguin to be a frequent cause.

The *prognosis* as to perfect recovery is only moderately good. In many cases the most faithful treatment fails to restore the paralyzed muscles, but in almost every case we can expect more or less improvement.

In the early stages of the paralysis, after the subsidence of the fever, the treatment should consist of mild stimulation to the spine; ergot and small doses of bromide of potassium should be given internally. Later in the disease, iodide of potassium should be given instead

of the bromide. When the palsy is established, electricity and massage are the means to be depended upon. They must be persisted in for months, or even for years. Internal treatment is of little or no value unless there is some failure in the general health of the child.

Spasmodic paralysis, as seen in children, is of two varieties: when of primary spinal origin, and when there is a descending degeneration of the cord from a primary cerebral lesion. Sometimes there seems to be a congenital defect in the motor tracts of both brain and cord. In the spinal variety there is often seen, soon after birth, rigidity of the limbs. At first this is only occasional, but as the child gets older every effort to move a limb causes muscular rigidity in it. The child does not attempt to walk until three or four years of age. Then, when it is supported under the arms, and it tries to stand or to walk, the movements are very peculiar and characteristic. The feet are extended and inverted, so that the child rests on the toes. The knees are strongly adducted and lock together, so that the legs become entangled. By degrees the child becomes able to walk with the aid of apparatus or some form of crutch. The hands and arms are often affected, and every effort causes muscular rigidity to come on. The mind is unaffected in these cases, and the speech may be distinct, although it is often very defective. Sensation is unimpaired, and the patella reflex and ankle clonus are exaggerated. There is no wasting of the muscles. By these symptoms we infer that the disease is localized in the lateral columns; but exactly what is the nature of the lesion we do not know, for no post-mortem examinations have been made in these cases. The cause is unknown. Hamilton found three of seven cases which he had collected were premature births. Adherent and contracted prepuce has been thought by some to be caused by reflex influence of the spasmodic paralysis, but operation has not given relief. The treatment should consist of massage, galvanism to the spine, ergot, and cod-liver oil. Fluid extract of conium may be given to allay spasm. In some cases great improvement follows this treatment. Even when we can do no positive good to the limbs, very much can be effected by the aid of apparatus. Properly-adjusted braces to the legs will enable a child to walk on crutches or in a Darrach wheel-crutch.

There is a form of spasmodic spinal paralysis in which the child is imbecile. In these cases there has probably been congenital defect in cerebral development. The head is small, and there is no evidence of intellect; often nystagmus is present.

Paralysis from Pott's Disease.—Paralysis of the lower extremities may result from caries of the spine. The lesion may be either a meningitis or a myelitis. If meningitis alone, there is considerable pain and contraction of the legs. Generally there is a transverse myelitis. The symptoms are numbness and pricking of the legs, with loss of sensation; gradually-increasing loss of power, with wasting of the muscles; incontinence of fæces, with retention or incontinence of urine. Sometimes there are ulcers over the sacrum or on the limbs.

The indications for treatment are evident. An apparatus which will take the weight of the body from the spine is necessary, and is sometimes sufficient of itself. Frequently, however, the application of the actual cautery over the spine brings improvement in the symptoms when an apparatus has done no good. Massage and electricity should be used to restore the atrophied muscles.

Paralysis from rachitis and diphtheria is seldom complete. The former is often spoken of as the pseudo-palsy of rickets. Negro children, who are very subject to rachitis in cities, often have rachitic paralysis. The child at three or four years is unable to walk or stand. Sometimes it has not sufficient muscular development to sit upright. It can move every limb, and has no loss of sensation, but has no power. Cod-liver oil and massage bring about the most satisfactory results in these cases. *Diphtheritic paralysis* usually begins in the muscles of the soft palate and pharynx, and extends to the extremities. It is generally bilateral and incomplete, but I have seen a case in which it was hemiplegic. It is considered peripheral in character, and is believed by some to be connected with the altered condition of the blood consequent on the original attack. Diphtheritic paralysis is rarely fatal, and lasts in most cases only a few weeks, although it may continue for months. Strychnine and electricity are the means to be employed, and the case usually responds promptly to these remedies.

Pseudo-hypertrophic paralysis is a rare affection, but is of much interest. The disease belongs almost exclusively to infancy. It is characterized by muscular paralysis, with great increase in the bulk of the muscles. This enlargement is due to fatty deposit, while the muscular tissue proper is atrophied. The affection begins with weakness of the legs, a peculiar balancing of the trunk, and separation of the legs in walking. The shoulders are thrown far back in standing and walking. There is great difficulty in getting from the sitting to a standing position. Later in the disease the muscles become wasted and shrunken, and the general health begins to suffer. Death results from implication of the respiratory muscles. The skin is mottled like a piece of Castile soap. The tendon reflexes are abolished, and electro-muscular contractility is impaired. There is often a greater or less amount of mental weakness. There is no loss of power over the bladder and rectum, and sensation is not affected. Heredity in-

fluences the disease, which is slow in its progress, but the course is steadily downward.

Friedreich's disease is still more rare than the preceding. It is practically locomotor ataxia in childhood. There is evidenced here also a hereditary predisposition, and female children seem most liable.

Cerebral Palsies.—Hemiplegia may result from some injury at the time of birth, either from the forceps or from the pressure of a prolonged labor. A child may be born hemiplegic after a perfectly natural and easy labor. Under these circumstances we must regard the paralysis as the result of imperfect cerebral development. Hemiplegia under these circumstances is generally permanent. The side affected grows less rapidly than the other. The flexors of the arm and hand are usually contracted. The leg becomes rigid in the act of walking.

Convulsion is almost always associated with cerebral paralysis, either immediately preceding the attack or occurring soon after. The convulsive movements are most violent on the side which is subsequently paralyzed. The child will have an idiotic expression and speak indistinctly, but its friends think it intelligent. The convulsions are liable to return when the child is older, and then assume an epileptic form. The walk is peculiar, and is called the *spastic* gait. The patient plods along looking as if he were about to pitch forward. The affected limbs are smaller and shorter, the growth of both bone and muscle being affected. In the choreic variety, where the arm is in constant motion, the muscles may become hypertrophied, but the bone remains short.

Prognosis.—As a rule, the prospect of recovery is bad: even if the patient gets well, the hemiplegic side remains awkward.

Treatment.—Cod-liver oil and massage, which always relaxes the contracted muscles. The affected limbs should be used as much as possible.*

Dr. HARRIS inquired if Dr. Sinkler had ever observed any hereditary predisposition to convulsions and cerebral paralysis.

Dr. SINKLER replied that the hereditary influence was decided even when no convulsions occurred.

CÆSAREAN SECTION.

Dr. R. P. HARRIS read a report of the autopsy upon Mrs. R., from whom two living children had been removed by Cæsarean section by Professor Gibson, of the University of Pennsylvania. The superior strait was reniform; conjugate diameter one and three-quarter inches, transverse diameter five and one-quarter inches. The malformation was due to rachitis and injury from a fall in her second year. A full report of the history of the patient, the operations, and the autopsy, can be found in the *American Journal of the Medical Sciences*, October, 1855, p. 422.

OÖPHORECTOMY.

Dr. E. E. MONTGOMERY reported the following case. Mrs. L., of Columbia, Pennsylvania, æt. 36 years, married ten years, pregnant five times, the last four years ago, was brought to my notice by Dr. H. T. Chase. Her health has been bad since her last confinement. First menstruation at twelve and a half years, regular and very free for one and a half years, when she fell, producing pelvic distress, after which for seven years the flow was very scanty, lasting but one or two days, and accompanied by excruciating pain. She improved somewhat after marriage. Her first conception was followed by so much nausea, vomiting, and anæmia that her physician advised and induced an abortion.

She is now regular as to time, but irregular as to quantity. It is preceded by an excruciating pain for two days, which continues until the flow disappears. She also has severe pain in the head. She is very nervous at all times, but this is much intensified during the period. Pain is more marked in the left inguinal region and down the corresponding limb. Coition and vaginal examination are very painful. The uterus is enlarged and painful, tender on pressure over both ovaries. Local uterine treatment had been kept up during the entire four years with no relief. Trachelorrhaphy had been performed; ovariotomy was advised. September 19, 1885, she entered my private hospital, and, assisted by Drs. W. H. and C. B. Warder and E. Eshleman, the uterine appendages were removed. The left ovary was composed of a number of cysts, the largest of which ruptured while adhesions were being separated. The right ovary was not enlarged, but it was removed to insure relief. The wound was closed with silk-gut, and dressed with sublimated gauze and absorbent cotton. There was no shock. The highest temperature reached was 101.6° at midnight of the 20th, and it became normal on the 22d. Sutures were removed on the eighth day, and the wound re-dressed for the first time. It had united throughout, and there was no irritation from the sutures. The effect upon her general health remains to be determined.

Dr. MONTGOMERY also reported a case of

SUPRA-VAGINAL REMOVAL OF THE UTERUS AND BOTH OVARIES FOR FIBROID TUMOR.

Ann U., æt. 27, was brought to me by Dr. T. H. Boysen, of Egg Harbor City, with the following history. Her menses from the beginning occurred every three weeks, and were free an entire week. During the last four years they have occurred every two weeks, and are attended with pain in the pelvis and down the limbs, and severe pressure upon the

* The paper, with illustrative cases and details of treatment, will be published in full in the *Archives of Pediatrics*.

bladder, causing frequent urination, and several times necessitating the use of the catheter. Dr. Boysen had diagnosticated fibroid tumor, which my subsequent examination confirmed. The tumor was the size of a child's head, filling up the pelvis, and apparently arising from the anterior wall. The examination led me to believe that the bladder was adherent over the anterior surface, and would render the removal of the tumor unsafe. I suggested the removal of the ovaries. She entered my private hospital September 15, 1885, for that purpose. Drs. W. H. Warder, Boysen, and Martin assisted; Drs. C. B. Warder and Stultweather present. An incision three inches long was made, and finding the tumor free from the bladder, with cervix sufficiently long to serve for a pedicle, the incision was extended to within an inch of the umbilicus above and symphysis below, and the tumor with some difficulty withdrawn. In the absence of a Tait's clamp, which had been ordered some days before, the pedicle was constricted by a wire écraseur, and the tumor, with the ovaries, was removed. The pedicle was then transfixed with two steel pins, and tied in three sections with strong silk thread. The peritoneum was fastened to the pedicle below the ligatures, and the wound closed with silk-gut sutures, the pins holding the stump outside. The wound was dressed with sublimated gauze and absorbent cotton. The operation was followed by some shock,—temperature 97.4°, pulse 104,—from which she soon rallied. She complained greatly of pain. A half-grain of morphine had been given by suppository, and three hypodermic injections of morphia, one-quarter grain each, were given during the afternoon before the pain was relieved.

At 3 A.M. of the 24th I was called by the nurse, who reported bleeding from the stump. Three ounces of blood had been lost. By aid of Dr. Warder a Wells's clamp was applied below the pins, apparently controlling the hemorrhage; but it recurred later in the day from the angles and from beneath the clamp. By this time the Tait's clamp had arrived, and the patient was etherized, the lower three sutures removed, the pedicle drawn up, the clamp applied so as to control it completely, and the wound again closed. The wound had united throughout. Temperature reached 100.6° at 9.30 P.M. The highest subsequently, 101.6°, was in the afternoon of the 25th, and it became normal on the 28th. Upon removing the dressings on the 27th, some pus welled up about the pedicle. As the skin was irritated, the dead pedicle was cut away until the clamp slipped off. There resulted, of course, considerable retraction of the stump, but the sloughed tissue is now nearly cleared away. The patient suffers no pain or discomfort; temperature normal. The tumor was situated in the anterior wall and fundus uteri, and projected into the uterine cavity.

Dr. PARISH remarked that removal of the ovaries had given such good results in cases of uterine fibroids, and was comparatively so free from danger, that he would like to hear from Dr. Montgomery his reason for his choice of operation.

Dr. MONTGOMERY replied that the tumor filled the pelvis and pressed upon the bladder and rectum, causing great and constant distress. As diminution of the size of the fibroid tumor is not a certain result of oöphorectomy, and as all the circumstances were in favor of the major operation, he decided upon it as the best one.

W. H. H. GITHENS,
Secretary.

NEW YORK PATHOLOGICAL SOCIETY.

A STATED meeting was held October 28, 1885, the President, JOHN A. WYETH, M.D., in the chair.

The Committee on Microscopy reported on the specimen of exfoliative catarrh of the bladder presented by Dr. Boldt at the last meeting. So far as could be determined with the specimen in its present condition, it could not be regarded as a cast of the urinary bladder in the sense it was supposed to be by Dr. Boldt: it only contained a part of the superficial layer, and its thickness was due to new deposit with œdematous infiltration.

Dr. W. M. CARPENTER presented two specimens for candidates. The first was a primary ulcer of the duodenum, situated within half an inch of the pyloric orifice, one and one-half inches by one inch in size; there was no perforation of the intestine, but peritoneal adhesions surrounded the ulcer.

CARCINOMATOUS ENLARGEMENT OF THE LIVER AND CANCEROUS DEPOSITS IN VARIOUS ORGANS OF THE BODY OF A GIRL AGED THIRTEEN YEARS.

The second specimen consisted of the greatly-enlarged liver from cancerous nodules, and was removed from the body of a girl aged 13 years and 6 months. There were also nodules in almost all of the organs of the body where such deposits usually occurred. Her father had died of phthisis; two cousins of her grandfather were believed to have had cancer of the breast. The child had always been considered very healthy. A year ago she was in vigorous health, and weighed eighty pounds. About the middle of August last she began to complain of feeling tired, lost color, and became listless. At first she had no pain, but later would cry out with pain in the region of the spleen. Her appetite became ravenous, and she ate with special pleasure things acid. Enlargement of the abdomen was first noticed on the 8th of September, and from that time there was rapid increase in the region of the liver. Death

occurred in October. The liver weighed twenty pounds, and contained cancerous nodules of various sizes: the lungs were about the only organs free from cancerous infiltration.

The specimen was referred to the Microscopical Committee for examination.

Dr. LOUIS WALDSTEIN also presented a specimen for a candidate, consisting of the first phalanx of the great toe, the seat of a semi-malignant tumor following an injury. The disease showed some signs of becoming actively malignant.

FIBRO-MYOMA OF THE UTERUS.

Dr. H. MARION SIMS presented a round tumor of the uterus the size of a child's head. The patient had been married eighteen years, had had one child some years ago, had menstruated regularly and had been in remarkably good health until three years ago, at which time she began to suffer from heavy, dragging pains, and also from darting pains in the iliac regions. She consulted him in October, when the uterus was four inches in depth; a movable tumor was felt, which was believed to be a uterine fibroid. The patient was very fat, and the abdominal incision had to be increased to nine inches in order to extract the growth. The patient rallied well from the operation, and did well, but on the third day complained of oppression about the stomach and vomited a quantity of black fluid, evidently from reverse peristaltic action in the intestines. It would seem that some of this material entered the air-passages and the patient died suddenly from suffocation.

The autopsical examination was limited to the abdominal cavity; the wound was in good condition; there were no signs of suppuration.

Dr. Sims also exhibited two vulcanized plates with grooves upon which the skewers could rest and not cut into the abdominal integument.

Dr. J. B. HUNTER had had like trouble with the skewers, for the prevention of which he had had flat buttons put on the ends of the skewers; but the plates shown were preferable, being larger. R. C. S.

PILOCARPINE IN ERYSIPELAS.—The treatment of erysipelas introduced by Prof. Da Costa, by the administration of jaborandi or pilocarpine, has been employed by others with similarly successful results. Dr. Charles W. Rook, of Quincy, Illinois (in a contribution to the *Medical and Surgical Reporter*), reports two cases of facial erysipelas treated with fluid extract of jaborandi (gtt. xxx every half-hour for five hours), followed by tonic doses of iron and quinine. In one case vomiting was produced, which was attributed to swallowing the salivary secretion.

REVIEWS AND BOOK NOTICES.

MOISTURE AND DRYNESS; OR, THE ANALYSIS OF ATMOSPHERIC HUMIDITIES IN THE UNITED STATES. An Essay read before the American Climatological Association (1884), and including the Presentation of a Rule of Moisture and Dryness by which the Climate is evenly divided, etc. By CHARLES DENISON, A.M., M.D. Chicago. 1885. 8vo, pp. 30.

The value of Colorado as a sanitarium is demonstrated by this study of comparative humidity of the air in different portions of the United States, which is accompanied by weather-maps prepared by the Signal Service of the War Department. The essay is based upon the proposition that "an actually small amount of atmospheric moisture is the most important element in the best climate for phthisis." Equability, so long the desideratum, is shown to be illusory and injurious, and the author contends with much vigor for coldness, variability, and stimulation, as against their opposites, warmth, equability, and enervation. The influence of various factors in producing atmospheric dryness or the reverse is considered, and localities similar in other respects are shown to be favorable to the invalid in proportion to their dryness; and, as cold favors the elimination of carbonic acid, the conclusion is reached that altitude and distance from the sea are of great value in a health-resort for consumptives.

RATIONALISM IN MEDICAL TREATMENT; OR, THE RESTORATION OF CHEMISM. By WILLIAM THORNTON. Boston, published by the Author. 1885.

This brochure is dedicated appropriately to those who think and reason. Restored chemism, in the language of the author, "means the re-establishment of the normal relative position of the atom, which brings about the chemical and physical integrity of the body, as the human system can be made to respond to chemical action, if understood, as easily as the crank of an instrument responds to the touch of the musician." If, as he asserts, rationalism in medicine requires the throwing aside of two-thirds of our materia medica, we hail its champion, and hope that he will not set his lance at rest until he has demolished every therapeutic windmill.

A TEXT-BOOK OF NURSING. For the Use of Training-Schools, Families, and Private Students. Compiled by CLARA S. WEEKS, Superintendent of Training-School for Nurses, Paterson, New Jersey, etc. New York, D. Appleton & Co. Cloth, 12mo, pp. 396.

This book, in twenty-three chapters, communicates a large quantity of useful information in a form intelligible to the public. It is

well written, remarkably correct, sufficiently illustrated, and handsomely printed. The amount of technical skill and knowledge required of nurses at the present day makes the use of some text-book indispensable. To those who need such a work we can speak approvingly of its design, scope, and execution.

THE PEDIGREE OF DISEASE. Being Six Lectures on Temperament, Idiosyncrasy, and Diathesis, delivered in the Theatre of the Royal College of Surgeons at the Session of 1881. By JONATHAN HUTCHINSON, F.R.S. New York, William Wood & Co. 1885. Cloth, 8vo, pp. 113.

These lectures have already appeared in the medical journals, but the profession will welcome them in this permanent and more acceptable form.

NEW REMEDIES AND CLINICAL NOTES.

THE SURGICAL TREATMENT OF CYSTS OF THE PANCREAS.—Of all abdominal organs, the pancreas has been least frequently subjected to surgical treatment, for which the anatomical location of this organ and the obscurity of its affections furnish a sufficiently satisfactory explanation. Situated high up in the abdominal cavity, and hidden behind such important organs as the stomach, omentum, and transverse colon, it is the least accessible of all the abdominal organs, and on this account its affections, wrapped in obscurity, have for the most part constituted objects for empirical medication. The relation of this gland to the surrounding organs, and its great distance from the anterior wall of the abdomen, the only point of approach, necessarily offer serious obstacles to diagnosis and direct treatment. From a diagnostic point of view, another great difficulty is our want of positive knowledge concerning the physiological functions performed by this gland in the process of digestion. As the symptomatology of all affections of the pancreas is always obscure, and a probable diagnosis can be made only in cases where the gland has become considerably enlarged by disease, it is apparent that our present clinical knowledge is limited to diseases which increase the size of the organ to a sufficient extent to permit its detection by palpation. Primary malignant disease of the pancreas, when it has advanced to such an extent that its presence can be diagnosticated with certainty by physical signs, will have invaded the adjacent tissues to such a degree as to preclude the advisability of an operation. Consequently, the efforts of the surgeon, for the present at least, must be directed exclusively towards the recognition and treatment of benign affections of this gland. Clinical experience does not extend beyond an imperfect knowledge of cysts of the pancreas.

The pancreas, like other secretory organs, is prone to become the seat of cystic tumors, the result of obliteration or obstruction of the common duct or one or more of its branches. Cysts originating in this manner are true retention-cysts, containing the physiological secretion from the distal portion of the gland-tissue, with perhaps accidental products, such as altered secretions, blood, and the products of inflammation.

In a very valuable paper on the surgical treatment of cysts of the pancreas, Dr. N. Senn, of Milwaukee, in the July number of the *American Journal of the Medical Sciences*, presented a full report of a case of retention-cyst of the pancreas which had recently come under his observation, and at the same time summarized in a compact form the clinical history of similar recorded cases, which serve as a basis for some general remarks.

In recapitulation, Dr. Senn submits the following conclusions:

1. Cysts of the pancreas are true retention-cysts.

2. Cicatricial contraction or obliteration of the common duct or its branches, and impacted calculi, are the most frequent causes of cysts of the pancreas.

3. A positive diagnosis of a cyst of the pancreas is impossible; a probable diagnosis between it and some other kind of cyst amenable to the same surgical treatment is adequate for all practical purposes.

4. The formation of a pancreatic fistula under antiseptic precautions commends itself as the safest and most expedient operation in the treatment of cysts of the pancreas.

INOCULATION FOR HYDROPHOBIA. — M. Pasteur has communicated to the Academy of Medicine and the Academy of Sciences the results of his latest experiments upon the prophylaxis and cure of rabies, together with the account of a case observed in the human subject. M. Pasteur now adopts the following method: A rabbit is inoculated with a fragment of the spinal cord of a mad dog; the animal is affected with hydrophobia in the space of about one fortnight. A portion of its spinal cord is employed to inoculate a second rabbit, which also contracts the disease, but more rapidly; the spinal cord of this second rabbit serves to inoculate a third, and so on. It is observed that at each step of this process the intensity of the disease becomes greater and the period of incubation shorter. When the spinal cord of these animals which have died of hydrophobia is suspended in a perfectly dry tube, its virulence diminishes by degrees, and at last disappears. A collection of these spinal cords —some of them entirely stale and powerless; others more fresh and active, others again

quite fresh and extremely active—is always kept in readiness. To render a dog insusceptible of rabies, he is first inoculated with the stale and powerless specimens, then with fresher and more active ones, and lastly with the most powerful of all, when he becomes quite proof against the inoculation of rabies. Lately, a young boy, 9 years of age, Joseph Meister, was brought by his friends to M. Pasteur's laboratory. He had been most severely lacerated by a mad dog, having fourteen bites in different parts of his body. M. Pasteur, in presence of the almost absolute certainty of death, inoculated the child according to his system: the first inoculation was made with a spinal cord fifteen days old on the 6th of July, sixty hours after the child had been bitten. Similar inoculations with virus of constantly increasing intensity were made up to the 16th of July, when the spinal cord employed was quite fresh. The child, having up to the present time, four months after the accident, exhibited no symptoms of hydrophobia, is considered radically cured by M. Pasteur, and he has already recommenced the same method of treatment upon a young shepherd, who, in defending other boys, was cruelly bitten by a mad dog, which he killed upon the spot. The results of this new experiment will be communicated by M. Pasteur in due time to the Academy. With respect to the first patient, it must be remembered: 1. That sixty per cent. of people bitten by mad dogs do not contract hydrophobia. 2. That the incubation of the disease is sometimes extremely long (cases have been known to occur two years after the bite). The experiment is not, therefore, absolutely conclusive, although it marks a great progress in the history of the disease, and justifies in some measure the enthusiastic applause with which the communication was received.—*Medical Times and Gazette.*

PILOCARPINE THE ANTIDOTE TO DATURINE.—A Hungarian physician, being called to a child of four who was in a comatose condition from having eaten, as her playfellows said, two handfuls of the ripe berries of the thorn-apple (*Datura Stramonium*), and in whose vomit the berries could be plainly detected, gave pilocarpine hypodermically, thinking that, as that had proved successful in atropine-poisoning, it ought to be useful in datura-poisoning also. He began with the fourteenth of a grain, and, as no effect was produced, he increased the dose to a seventh. As improvement was now evident, this was repeated. Altogether in five hours he gave six-sevenths of a grain, and by that time the child was convalescent. No physiological symptoms of pilocarpine were produced until the last dose was given, which was followed by profuse secretion of saliva and perspiration. The author therefore concludes that five-sevenths of a grain of pilocarpine had been required to neutralize the daturine, its own physiological action not coming into play until that was completely effected. He thinks that this case sufficiently demonstrates that pilocarpine is antidotal to daturine.—*Medical Times and Gazette.*

A NEW CANCER-CURE.—The *Euphorbia heterodoxa*, a native of Brazil, possesses a resinous active principle, contained chiefly in the juice, which exerts a peculiar destructive action upon certain neoplasms. Dr. Landowski, at the recent French Congress at Grenoble, called attention to the fact that the juice of this plant had the reputation among the natives of curing cancer. He had experimented with it in chancroids, epitheliomata, syphilitic vegetations, and had found it to possess a powerful escharotic effect, with a dissolving action upon organic tissues, resembling a combination of a powerful caustic with papaine. The remedy is applied with a brush, and the tumor dressed with vaseline containing boric acid. Dr. M. de Santa Cruz has found that the resin possesses the same properties as the juice, and is permanent, while the juice quickly deteriorates.

IN trigeminal neuralgia, two-thirds of a grain of salicylate of cocaine, injected into the most painful spot and repeated several times, has been found curative by Dr. M. Schneider.

ANTIPYRIN may be given in syrup of raspberries, syrup of lemon, simple elixir, compound elixir of taraxacum.

MISCELLANY.

AT the stated meeting of the Medical Jurisprudence Society held on the 10th instant, at the Hall of the College of Physicians, Dr. John H. Packard and Thomas W. Barlow, Esq., jointly presented a paper on "The Extension of Privilege to Communications between Physician and Patient." Several new members were received.

NOTES AND QUERIES.

THE EXTERNAL APPLICATION OF THE TINCTURE OF BELLADONNA IN RETENTION OF URINE.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

A short time ago I was hurriedly summoned to see a little boy who was suffering much from retention of urine, brought about by a kick, by another boy, received on the perineum just over the prostatic portion of the urethra, producing not only paralysis of the muscles of that part, but also enlargement of the prostate gland, with stricture and retention of urine, and all efforts at urination were futile. For three days this state of affairs

had continued without any relief, but all the while getting worse, notwithstanding all the efforts which had been made to relieve him. The case was now one of critical importance, as life depended upon a speedy relief. I at once ordered a warm hip-bath for ten minutes, hoping at the end of it to be able to pass a small-sized catheter, but signally failed. Then I applied the tincture of belladonna over the *lower part* of the abdomen and perineum, hoping to relax the muscular contraction. At the end of another ten minutes I made a second attempt to pass the catheter, which I succeeded in doing, as there flowed a few drops of bloody urine. Feeling satisfied at the success, and knowing that I had broken the way and relieved the stricture, I desisted from the further use of the instrument, fearing that I might do some harm and thereby increase the trouble. I ordered the patient to be wrapped in warm blankets and put to bed, giving him one grain of opium and a half-grain pulv. ipecac every hour until he slept soundly, occasionally bathing the perineum with the tincture of belladonna. He fell into pleasant sleep, and at the end of five hours awakened and passed one quart of urine, and that without trouble. The relief was permanent. The treatment was continued for a few days, and the patient was well. As an evidence of the fact, he has been playing around the streets every day since. J. A. H.

MILTON, DEL., October 31, 1885.

COCA-LEAF CHEROOTS.

TO THE EDITOR OF THE PHILA. MEDICAL TIMES:

DEAR SIR,—I have received such a flood of letters in relation to coca-leaf cigars and cigarettes from all parts of the United States, since my article on this subject in your issue of October 19, that I feel sure the following letter from Messrs. Parke, Davis & Co., of Detroit, will be of interest to your readers. The letter is addressed to myself, and says,—

"Referring to your article on 'Coca-Leaf Cigars and Cigarettes' published in the *Medical Times* (October 19, 1885), we beg leave to call your attention to the enclosed samples of coca-cheroots, which we have had made to meet the extensive demand you have created. A cheroot can be manufactured much cheaper than a cigar, and will of course retail at a lower price in proportion. Though containing about the same amount of coca as the cigar you sent us, the cheroot will retail at five cents apiece instead of ten cents apiece, which, we believe, is the price you quoted for the cigars.

"Please tell your medical friends that we would be happy to send samples to those who desire to try them."

In relation to the above letter, it seems to me that the cheroot fills every indication for the cigar, and I take pleasure in referring the profession to this well-known house, who will supply them with the very best quality of cheroot containing carefully-selected coca. As they are large importers of the drug, they have every opportunity of doing so.

But let me say at this time that it is my earnest desire to secure a very general expression of opinion concerning the use of coca in this form from the profession, and at an early date; and it would afford me great satisfaction to receive reports of trials, whether the results are favorable or otherwise; also to receive suggestions pertaining to the subject in any form.

Very truly yours,
F. E. STEWART.

LOCK-BOX 248.

OBITUARY.

GEORGE HAMILTON, M.D., died of apoplexy at his residence, in Philadelphia, October 30, 1885. Dr. Hamilton was born in this city in 1808, and was graduated in 1831 from the medical department of the University of Pennsylvania. He passed the most active part of his professional life as a country physician near Philadelphia, but for many years has led a retired life. He was an active member of the County Medical Society, of which he was elected President in 1868, and also a prominent member of the College of Physicians, to whose Proceedings he occasionally contributed. He wrote a memoir of his friend, the late Prof. J. A. Meigs, which he read before the State Medical Society. Of late years he took much interest in the question of the prevention of abuses in connection with the practice of vivisection.

A severe and sudden bereavement, the death by burning of a favorite daughter and a grandson by the burning of their residence on Pine Street last winter, undermined his health and strength. Owing to his temperate and regulated life, he was enabled to lead an active existence, although he was naturally rather delicate. He enjoyed full possession of his faculties up to the last day, and had just returned from church on Sunday morning when he was stricken. His wife, a daughter, and a son (who is a well-known artist) survive him.

J. A. ARMSTRONG, M.D., a prominent physician of Camden, inspector of the State Board of Health for the counties of Camden, Gloucester, and Cumberland, died with cerebral apoplexy at his home, October 28, 1885. He was fifty years of age, was a member of several scientific societies, and at one time was coroner.

SAMUEL G. ARMOR, M.D., Dean of the Faculty of the Long Island College Hospital, and Professor of Practice in that institution, died of bronchitis October 28, 1885. He was a man of superior attainments, and was formerly a professor in the University of Michigan. He was an able writer and observer, and was not only eminent in his profession, but also was endeared to a large circle of friends by his agreeable manners and his sterling traits of character.

A. J. MCKELWAY, M.D., late surgeon of the Eighth Regiment New Jersey Volunteers, died on Saturday, November 7, 1885, at his home, Williamstown, New Jersey, in the seventy-second year of his age. He was the father of Mr. George I. McKelway, a leading druggist of this city.

OFFICIAL LIST

OF CHANGES IN THE STATIONS AND DUTIES OF OFFICERS SERVING IN THE MEDICAL DEPARTMENT U.S. ARMY FROM OCTOBER 25, 1885, TO NOVEMBER 7, 1885.

MAJOR ELY MCCLELLAN, SURGEON.—Leave of absence granted in orders, Cavalry Depot, Jefferson Barracks, Missouri, October 30, is extended seven days. S. O. 254, A. G. O., November 4, 1885.

MAJOR D. L. HUNTINGTON, SURGEON.—Detailed on Board to inspect Army and Navy Hospital buildings at Hot Springs, Arkansas. S. O. 245, A. G. O., October 24, 1885.

MAJOR HENRY MCELDERY, SURGEON.—Granted leave of absence for four months from November 1, 1885. S. O. 246, A. G. O., October 26, 1885.

CAPTAIN J. H. PATZKI, ASSISTANT-SURGEON.—Appointed member of Board to meet at Forts Jackson and St. Philip, Louisiana, November 5, 1885, to select a site for the new quarters for the ordnance-sergeants at those posts. S. O. 230, Department of the East, October 28, 1885.

CAPTAIN G. H. FORNEY, ASSISTANT-SURGEON.—Granted leave of absence for two months, to take effect after the return from leave of Surgeon J. C. Baily (major). S. O. 87, Division of the Atlantic, October 24, 1885.

CAPTAIN R. G. EBERT, ASSISTANT-SURGEON.—Ordered from Camp Grant, Riverside Park, New York City, to Fort Hamilton, New York Harbor, for duty. S. O. 237, Department of the East, November 5, 1885.

FIRST-LIEUTENANT G. E. BUSHNELL, ASSISTANT-SURGEON.—Assigned to duty at Camp Grant, Riverside Park, New York City. S. O. 237, Department of the East, November 5, 1885.

FIRST-LIEUTENANT C. C. BARROWS, ASSISTANT-SURGEON.—In addition to his other duties, to take temporary charge of office of the Medical Division, Department of Arizona. S. O. 102, Department of Arizona, October 17, 1885.

FIRST-LIEUTENANT C. B. EWING, ASSISTANT-SURGEON (Fort Leavenworth, Kansas).—To accompany Congressional Committee, of which Hon. W. S. Holman is chairman, in its visit and inspection through Indian Territory. S. O. 160, Department of Missouri, October 23, 1885.

FIRST-LIEUTENANT F. J. IVES, ASSISTANT-SURGEON.—Relieved from temporary duty at Fort Laramie, Wyoming, and ordered to Fort D. A. Russell, Wyoming. S. O. 106, Department of the Platte, October 22, 1885.

FIRST-LIEUTENANT E. R. MORRIS, ASSISTANT-SURGEON (recently appointed).—Assigned to duty at Fort Bayard, New Mexico. He will continue on detached service under orders of District Commander. S. O. 160, Department of Missouri, October 23, 1885.

LIST OF CHANGES IN THE MEDICAL CORPS OF THE U.S. NAVY FROM OCTOBER 25, 1885, TO NOVEMBER 7, 1885.

MEDICAL-DIRECTOR DAVID KINDLEBERGER.—Granted leave of absence to June 30, 1886, with permission to leave the United States.

ASSISTANT-SURGEON F. W. F. WIEBER.—To remain on Receiving-Ship "Vermont" until May 15, 1886.